Evaluation of Indiana's *First Steps* Early Intervention System Report November 2008

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First Steps

External Review and Audit of the Early Childhood Center Indiana Institute on Disability and Community Indiana University Evaluation of Indiana's *First Steps* Early Intervention System

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The Early Childhood Center is one of seven centers located at the Indiana Institute on Disability and Community at Indiana University, Bloomington. The work of the Indiana Institute encompasses the entire life span, from birth through older adulthood. Areas of emphasis include:

- Early intervention;
- School improvement and inclusion;
- Transition, employment, and careers;
- Age-related change;
- Autism spectrum disorders;
- Disability information and referral;
- Technology;
- Planning and policy; and
- Individual and family perspectives.

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The Early Childhood Center, Indiana Institute on Disability and Community, Indiana University was contracted by the Division of Disability and Rehabilitative Services (DDRS), Family and Social Services Administration in October 2007 to conduct an evaluation and independent audit of the Indiana First Steps Early Intervention System. The focus of this evaluation grew out of a March 2007 meeting among program stakeholders held at the Indiana Institute on Disability and Community (IIDC). At that meeting, several individuals met in the Collaborative Work Lab to identify and prioritize concerns and the evaluation questions they wanted addressed through a formal evaluation of the First Steps program and the impact of major policy changes that took place primarily in 2006.

The questions generated were loosely organized under four headings: Demographics, Fiscal, Policy Changes, and Administration and Infrastructure. The original stakeholder questions are presented in Table 1. As an initial step in putting together a workable proposal for DDRS, staff of the IIDC organized and edited the output of the stakeholder committee to shape all suggestions into answerable evaluation questions. These revised questions, which centered on the impact of major policy changes in First Steps, were organized into five major evaluation questions that frame our efforts. The five questions are as follows:

What impacts have major First Steps policy changes had on the:

1. **Number and types of children and families entering and receiving First Steps services?**
2. **Types and amounts of services children and families receive from First Steps?**
3. **Costs of providing First Steps services?**
4. **Quality of First Steps services?**
5. **Recruitment and retention of personnel?**

It was expressed and should be noted here that there were concerns about conducting an evaluation of the major policy changes so soon (one year) after initiation of the changes. Initiating and successfully executing a major policy change (e.g., eligibility, evaluation procedures, cost participation) can take up to a year in and of itself. Assessing the impact of a major policy change, and ensuring that any observed changes or trends are not one-time anomalies, generally necessitate the need to delay these types of evaluations for a period of two to five years to more accurately identify any true changes or trends. This evaluation was limited to examining data 15-18 months after many of the policy changes investigated. Therefore, the results of this evaluation should be examined with these caveats.

The remainder of this report is organized into three sections. The next section will present an overview of the data sources and methodology used by the evaluators to answer the questions. The following section will present the results of our findings organized into six subsections for each of the major questions presented above. The final section will provide a summary and brief discussion of the major findings from this evaluation.

Table 1

Original Stakeholder Questions

Demographics

1. What is the number of referrals, intakes, evaluations and initial IFSPs by age and by county during 2005, 2006, and 2007? Identify trends and provide analysis.
2. What is the number of providers by discipline by county providing services during 2005, 2006, and 2007?
3. What is the number of children served by county and by level of delay or diagnosis compared for 2005, 2006 and 2007?
4. What is the time from referral to service2005 to 2007?
5. What are the numbers of providers by county, by specialization or category (2005, 2006 and 2007)?
6. Are service coordinators efficiently (timeliness, number of cases, are they overburdened) handling caseloads in large county areas from cluster office?
7. What is the number of initial Individualized Family Service Plan (IFSP) meetings during 2006 and 2007 with no Eligibility Determination Team (EDT) attendance?
8. What is the number of providers who have entered and left by discipline and by county from 2005 to 2007?
9. What is the number of providers by discipline by county entering the system during 2005, 2006, and 2007?
10. Are we serving a good demographic cross section of eligible children or are there pockets of need (e.g. sufficient services for children in very rural and very urban areas)?

Fiscal

1. Are children with comparable diagnoses and delays receiving comparable levels of service/expenditures by cluster/by ED Team?
2. Average cost per child further refined to reflect average cost for severity of disability 2005-2007.
3. What are the numbers of families leaving the program due to cost participation?
4. Does the average cost per child differ by income category of family?
5. What are the total First Step Expenditures for 2005, 2006, and 2007?
6. What is the average cost of services per discipline?
7. What percent of the amount billed to the parent is collected by the state?
8. What are the System Point of Entry (SPOE) costs compared for 2005, 2006 and 2007?
9. What amount of money has been spent on direct services by discipline in 2005, 2006, and 2007 adjusted for eligibility changes?
10. What is the number of families that do not initiate the enrollment process once they learn of cost participation?
11. Are providers leaving the program due to reimbursement rates?

Table 1 continued

Original Stakeholder Questions

Policy Changes

1. What is the number of children determined eligible before and after the implementation of Assessment, Evaluation, and Program System for Infants and Toddlers (AEPS)?
2. What is the consistency of the application of AEPS (parent interview versus direct administration)?
3. Are children receiving services that are recommended (recommended versus availability of providers in the area)?
4. Are children with comparable diagnoses and delays receiving comparable levels of service/expenditures by cluster?
5. Are recommendations being made based on provider availability?
6. What are the income levels of families to determine how families are being impacted by cost participation?
7. Do families have an effective choice of a service coordinator within the SPOE?
8. Are policy changes being implemented consistently cluster to cluster?
9. What is the number of children determined eligible after the May 1, 2006 implementation of eligibility criteria.
10. What is the impact of the use of the AEPS?
11. What is the comfort level of providers in their use of the AEPS?

Administration and Infrastructure

1. What is the most effective way to insure adequate numbers of providers in each area?
2. What would providers see as an incentive to serve underserved populations?
3. In those areas with a suspected provider "shortage," is it due to lack of providers, over-utilization, or both?
4. Should there be payment premiums for providers who agree to practice in high needs areas?
5. Has the movement of the central reimbursement office (CRO) from Covansys to EDS resulted in provider billing frustration and departure from the system?
6. How are we ensuring quality providers in the system?
7. How can we improve communication between central office and SPOEs/LPCCs/providers and parents?
8. Would a random sample of providers rate the training provided as effective, and of value?

Section 2: Methodology

The evaluators employed several methodologies for collecting the data needed to answer the proposed evaluation questions. The data was gathered from seven major sources, including:

1. EDS
2. Family and Social Services Administration Data Warehouse
3. First Steps Administration
4. First Steps Providers
5. First Steps Families
6. Literature on professional development practices
7. Other states and national data sources

This section will briefly discuss the data and data collection strategies used for each of the seven data sources.

1. EDS

EDS is the company that currently manages the Central Reimbursement Office (CRO) for First Steps (FS). All service claims for all families pass through the CRO before being transferred to the Data Warehouse. The Data Warehouse is ultimately responsible for reviewing, cleaning, and storing the data it receives from the CRO. Together, these two entities house demographic, service, and cost data for every child and family served by First Steps. They also collect and retain service and payment information for every service provider in First Steps, except for Service Coordinators after July 1, 2006. In the beginning stages of data collection, EDS provided much of the information concerning children and families served by First Steps, service data, and cost information. This data enabled the evaluators to gain a clearer sense of the data that was available and the types of data requests that could be made. After initial analyses, the FSSA Data Warehouse provided data that drove all related child, service, and cost analyses (except cost participation). Finally, EDS provided cost participation and cost recovery data.

2. FSSA Data Warehouse

Data was gathered from the Data Warehouse over a period of several months and several data queries. The Data Warehouse generated eight different data queries. A brief description of each of these queries is presented in Table 2. The results of each query were saved into a text file that was either emailed to the evaluators, or provided on a CD if the files were too large. This data was saved onto a password-protected personal computer and loaded into *Statistical Package for the Social Sciences (v. 16.0)*, the software program used for conducting the statistical analyses.

It should be noted that there were changes in the data collection systems that provide the raw transactional data to the Data Warehouse. At the time of the evaluation, the CRO was EDS; however, there was a change in the CRO within the time frame this evaluation investigated. While the Data Warehouse implements procedures to review and "clean" the data, it should be noted that this change in data systems might have had an impact on the quality of the data.

3. First Steps Administration

The First Steps Administrative staff provided considerable data that overlapped with the data provided by the Data Warehouse in the form of aggregate reports. This information included monthly child counts by month/year and by county; monthly service expenditures by county;

Table 2
Data Queries from the FSSA Data Warehouse

Data Query	Description
Child Referral, Intake, Termination	The following data were provided for every child who had any contact with First Steps from 1997 through 2007: Name, Child ID, address, date of birth, gender, race, language, county, eligibility, reasons for termination, and dates of referral, intake, evaluation, initial IFSP, and termination.
Family Income	The following data were provided for every child who had any contact with First Steps from 1997 through 2007: Child ID, amount of income, type of family income, and time of income amount (e.g., weekly, monthly).
Percentage Poverty	The following data were provided for every child who had any contact with First Steps from 1997 through 2007: Child ID, family federal poverty level percentage.
Child Summary (of services provided)	The following data were provided for every child who received First Steps services from 1997 through 2007: Month and year of service, service type, sum of hours provided for that type/month/child, and sum of claims paid for that specified type/month/child.
Services Initially Authorized/Total Paid Per Child by Service Type	The following data were provided for every child who received First Steps services from 2001 through 2007: Child ID, service type, service initially authorized, sum of services paid for a service type.
Attendance at First IFSP Meeting	The following data were provided for every child who received First Steps services beginning in 2004 through 2007: Child ID, date of first IFSP meeting, provider code/description for each provider present.
Child Count by Service Coordinator	The following data were provided for all service coordinators who provided services from 2001 through July 2006: Provider ID, month/year of service, counts of children served for that provider ID and month/year.
Summary by Provider of Children Served and Hours of Service	The following data were provided for all providers who provided First Steps services from 2004 through 2007: Provider ID, month/year of service, service type, count of children served for that month, sum of hours claimed by provider/month, sum of claims paid by provider by month

monthly counts of providers by type that billed for services; and service coordinator caseloads. This data provided an important reference point in comparing the results from our statistical analyses from the data provided by the Data Warehouse. Major differences with the results from administrative staff were examined to determine why the discrepancies occurred and which data

were most accurate. In addition, First Steps Administrative staff provided all information concerning overall program expenditures, including administration, contracts, services, system points of entry, service coordination, professional development, and evaluation. More recently, state administrative staff provided aggregate data concerning cost participation, data that has been difficult to access from EDS. In addition, state staff provided copies of local and state monitoring documents, federal reports, and onsite monitoring procedures and reports.

First Steps administration and monitoring personnel provided monitoring documents which included a) Indiana's Improvement Plan (2002), b) focused monitoring results and, c) federal reporting. Indiana's Improvement Plan identified four cluster areas: Early Intervention Services in Natural Environments, Family-Centered Services, Public Awareness and Child Find, and General Supervision. This document was reviewed for insight into Indiana's efforts to improve areas of identified need and later reflection on successful strategies that support present conditions and expectations of the First Steps Early Intervention System in Indiana. Focused monitoring consists of monthly Cluster or local Early Intervention (EI) record reviews with an annual verification visit by the state monitoring team. The summary of state monitoring team annual verification visits for each cluster and a summary of statewide results were reviewed. Indiana's State Annual Performance Report (APR) for Federal FY 2006 (7/1/06-6/30/07) was reviewed and then a 'find' search was completed using the terms: training, professional development, personnel preparation, assessment, cost participation, eligibility determination, ED Teams, recruitment, retention. The results of this search added support to the data findings.

4. First Steps Providers

IIDC conducted an online survey of First Steps service providers, past and present. Utilizing databases maintained by IIDC and ProKids/Unified Training System, a single database of current and past First Steps providers, including all disciplines, service coordinators, and members of Eligibility Determination Teams (EDT) was assembled. Using the tools of the online survey instrument, Survey Monkey, 3305 providers were emailed invitations to participate in a confidential survey in January 2008. Four hundred and forty-nine emails were returned due to errors or closed email accounts. A total of 1164 First Steps providers participated in the online survey. Table 3 provides a breakdown of the type and numbers of providers who

Table 3
Number and Types of Providers
Participating in Survey

Position	Frequency	Percent
Unknown	184	15.8%
Audiologist	24	2.1%
Developmental Specialist	222	19.1%
Director/Administrator/Supervisor	13	1.1%
Initial Intake Service Coordinator	56	4.8%
Nutritionist/Dietician	6	0.5%
Occupational Therapist	118	10.1%
Ongoing Service Coordinator	132	11.3%
Other	31	2.7%
Physical Therapist	125	10.7%
Physician	3	0.3%
Psychologist	5	0.4%
Registered Nurse	4	0.3%
Social Worker	7	0.6%
Speech and Language Pathologist	234	20.1%
Total	**1164**	**100**

participated.

Midway through the provider survey, questions were raised concerning the data that was being gathered, particularly from service coordinators and members of the EDTs. Minor revisions were made to the survey, and an additional request was sent to 401 service coordinators and EDT members who were currently offering services at that time (Spring 2008). Six emails were returned due to incorrect addresses. These addresses were corrected, and new invitations were sent. In addition, the state expressed their desire for the IIDC to collect enough survey responses to constitute a representative sample of providers. SPOE supervisors were asked to encourage participation among their staff to ensure that this level of response was achieved. Two hundred and seventy-three providers responded to this additional survey, 149 service coordinators and 124 EDT members.

5. First Steps Families

IIDC conducted a survey of a representative sample of families who had some contact with First Steps between 1997 and 2007. First Steps maintains information on all families who are referred, evaluated, and received services. This includes families who were referred but declined intake or evaluation; families whose children were evaluated but found not to be eligible for services; families who were eligible for services but declined; and, families who received services for any period of time and who had exited First Steps for any number of reasons. During that time, 151,219 families were referred to First Steps. From this total population, a random sample of 30,000 families was drawn (using the *SPSS* software program), and the names, addresses, and ID numbers were put into a text file and sent to the First Steps program. The First Steps program mailed postcards inviting the 30,000 families to participate in a survey to evaluate their experiences with First Steps. In addition, information about the family survey was shared with First Steps SPOEs, The ARC of Indiana, INARF, and a news release was published through Indiana University to reach additional families. Families were given a choice of participating in an online survey using Survey Monkey, completing and mailing in a paper and pencil survey, or completing the survey over the phone with one of the evaluators.

Table 4
Number and Types of Families Participating in Survey

Position	Frequency	Percent
Declined to participate	19	2.5%
Child not eligible for services	77	10.0%
Received services but withdrew	16	2.1%
Received services until family moved	14	1.8%
Received services until no longer needed	243	31.6%
Received services until child turned 3	401	52.1%
Total	**770**	**100.0%**

A total of 9917 (33%) postcards were returned due to family changes in residence. Seven hundred and seventy families did participate in the survey. Table 4 provides descriptive information about the families who participated.

6. Literature on Professional Development Practices

Another primary activity of the audit was a review of the literature, which addressed the issues in questions 5 & 6. A thorough and focused search of web-based documents, professional journals and scholarly books was conducted. The focus of the search was related to four specific topics:

1) *professional development*, 2) *recruitment*, 3) *retention* and 4) efforts to *provide service to underserved populations*. The research and practical application of information concerning *professional development* yielded an extraordinary amount of information. Searches regarding *recruitment* and *retention* yielded limited material and little of what was retrieved related to early intervention. The literature review was then expanded to include *teacher recruitment* and *retention* given that this topic might relate to young children and the *recruitment* and *retention* of specialists and other providers in Part C. *Providing service to underserved populations* was another area of limited information.

Several methods were identified to research the availability of information associated to the four topics (see Table 5). First, a review of literature utilizing One Note, a review of Internet resources as listed in Google Scholar, and a search of professional journals using the Academic Search Premier database. Using key words listed in the chart below, One Note identified literary and scholarly material included in professional books and journals. Those journals were divided to focus on journals related to young children, early intervention and early development with a primary resource being Topics in Early Childhood Special Education (TECSE) and Infants and Young Children. Other strategies included Indiana's 2006 Annual Performance Report, review of the 2007 survey of the Infant & Toddler Coordinators Association (ITCA) and finally e-mails and conversations with state cluster leadership who shared their own local efforts in recruitment, retention and strategies to serve underserved populations in their communities.

Table 5
Information and Literature Search Strategies Employed

Topic	One Note, Google Scholar, Academic Search Premier (keywords)	Other strategies
Professional Development	Early intervention, professional development, Training strategies	Review of state documents, APR (2006), Training Times Newsletter
Recruitment	Recruitment, retention, providers, specialists, infants, toddlers, Part C	Anecdotal report from cluster coordinators, APR (2006), ITCA Membership Survey Results (2007)
Retention	Recruitment, retention, providers, specialists, infants, toddlers, Part C	Anecdotal report from cluster coordinators, APR (2006), ITCA Membership Survey Results (2007)
Underserved Populations	Rural, underserved, infants, toddlers.	Anecdotal report from cluster coordinators, APR (2006), ITCA Membership Survey Results (2007)

7. Other State and National Data Sources

Information for the national comparison came from several sources. The first was a thorough search of the IDEAdata.org and the monitoringcenter.lsuhsc.edu websites. Both of these sites contain state level reporting data from the Office of Special Education Programs (OSEP). Data relevant to the audit questions was extracted and summarized for the final presentation. A search of the National Early Childhood Technical Assistance Center (NECTAC) website and

conversations with NECTAC professionals yielded information on the current practices in other states. Given this information, the Part C coordinators of the 18 states that employ a statewide data system similar to Indiana's were contacted by e-mail. Coordinators were asked to share any relevant data and seven states responded: CT, MO, VA, NY, MS, NM, and IL. Finally, data was obtained by reviewing the results from a 2007 Infant-Toddler Coordinator's Association membership survey regarding current practices and issues being discussed at the state level.

Statistical Analyses

Quantitative statistical analyses were conducted using SPSS-Statistical Package for the Social Sciences, Version 16, on a Macintosh personal computer. Both descriptive and comparative statistics were conducted, depending on the nature of the question asked.

Qualitative analyses were conducted on the open-ended survey questions. All survey responses were loaded into a database (FileMaker Pro), and two evaluators were assigned to code each survey question. One evaluator would conduct thematic analyses of each response (some responses had multiple thematic codes). That person would then use the search features of the database to review the responses under each thematic code to determine if the responses and codes fit. Once the first person was completed, the second reviewer would go through each response, review the codes assigned by the first reviewer, and assign either the same codes indicating agreement or different codes for later discussion with the first reviewer. When there was disagreement, either in the codes or in coding, the two reviewers would meet to resolve their differences. When the two reviewers could not resolve their differences, the principal evaluator was called in to make final decisions. Once all of the survey comments had been coded, the number of comments associated with the major codes/themes was computed.

Section 3: Results

A comprehensive set of analyses was conducted as part of this evaluation of Indiana's First Steps Early Intervention System. The results of these analyses are organized under each of the five major questions presented earlier.

1. What impact have changes in First Steps had on the number and types of families entering and receiving services?

The Stakeholder Committee identified seven specific questions that focused on the First Steps referral and enrollment process, including intake, evaluation and eligibility determination, and development of the first Individual Family Service Plan (IFSP) for children who are eligible. The questions included:

1. What is the number of referrals, intakes, evaluations and initial IFSPs by age and by county during 2005, 2006, and 2007? Identify trends and provide analysis.
2. What is the number of children determined eligible after the May 1, 2006 implementation of eligibility criteria?
3. What is the impact of the use of the AEPS?
4. What is the number of children determined eligible before and after the implementation of AEPS?
5. Are we seeing more additional evaluations after IFSP (now that only two ED team members go out)?
6. What is the number of initial IFSP meetings during 2006 and 2007 with no EDT attendance?
7. What is the number of families that do not initiate the enrollment process once they learn of cost participation?

The Stakeholder Committee also identified five specific questions that focused on the number of children who moved through the enrollment process, were determined eligible, and received services from Indiana's First Steps system.

8. What is the number of children served by county and by level of delay or diagnosis compared for 2005, 2006 and 2007?
9. What are the income and ethnic breakdowns on children in2005 compared to 2007?
10. Is there a significant difference in the number of children served in each cluster adjusted for population?
11. Are we serving a good demographic cross section of eligible children or are there pockets of need? (e.g., sufficient services for children in very rural and urban areas)?
12. What are the numbers of families leaving the program due to cost participation?

The specific stakeholder questions examined here look at how well Indiana has done in serving an appropriate and representative sample of the birth to three population, and again, if there have been any adverse effects because of the various policy changes enacted.

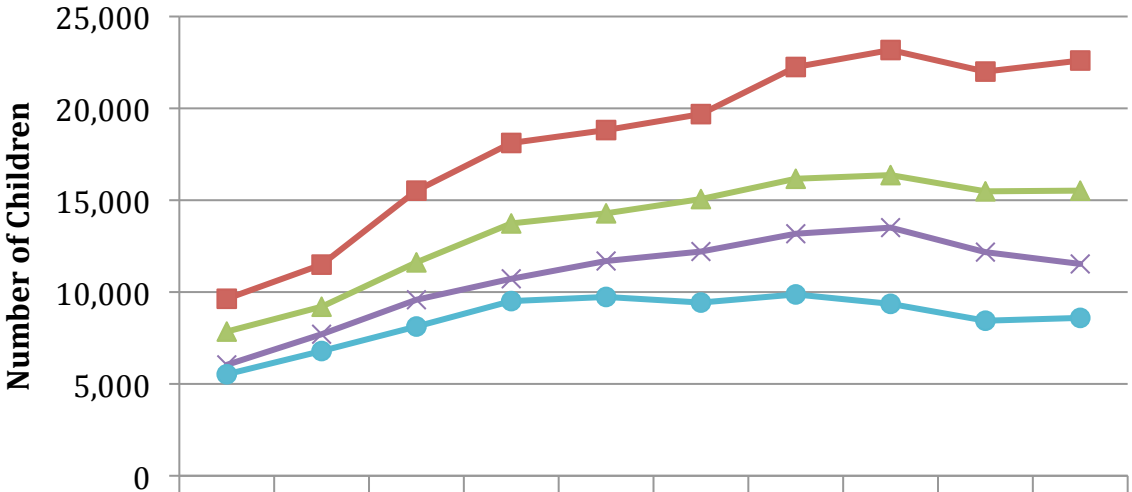
Child demographic and service data concerning referrals, intakes, evaluations, and first IFSPs were collected electronically from the Data Warehouse and analyzed to provide results for answering the 12 questions. Many of the questions posed by the Stakeholder Committee asked for an examination of the data for the three years ending in 2007; however, the Data Warehouse was able to provide data from as far back as 1998 (and earlier). Data as far back as 1998 were included in the analyses to examine recent trends in the context of possible historical trends.

1. **What is the number of referrals, intakes, evaluations and initial IFSPs by age and by county during 2005, 2006, and 2007? Identify trends and provide analysis.**

Two analyses of the number of referrals, intakes, evaluations, and initial IFSPs were conducted: one that counted all instances, which included duplicate children assigned different identification numbers; and a second unduplicated count by removing instances where a child's first and last name and date of birth matched. Figure 1 presents the *frequency of referrals, intakes, evaluations and first IFSPs* from 1998 through 2007, including duplicates. Figure 2 presents the unduplicated counts for the same period. The results presented in this figure indicate:

a. From 1998 through 2007, approximately 39,000 families left and re-entered the First Steps system, either due to declining at enrollment, moving, failing to appear, or periodic follow up.
b. With the exception of a slight drop in 2006, the number of referrals has steadily increased each year since 1998.
c. The number of intakes has increased each year, but not as steeply as referrals since 2001.

Figure 1 Number of Referrals, Intakes, Evaluations & First IFSPs by Year (Duplicated Count)



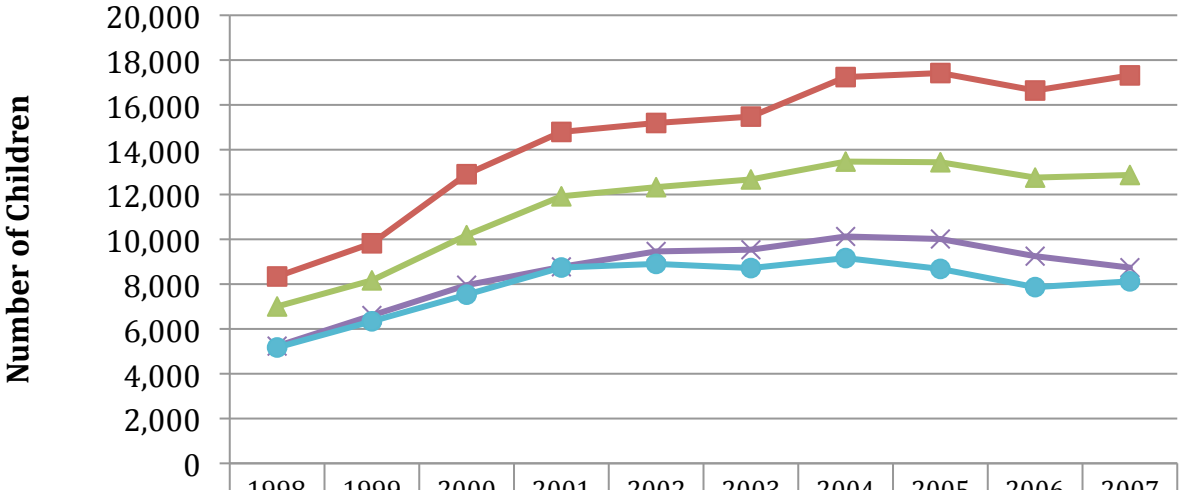
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Referrals	9,635	11,494	15,520	18,116	18,819	19,687	22,251	23,176	22,002	22,604
Intakes	7,850	9,203	11,617	13,736	14,286	15,063	16,168	16,368	15,484	15,521
Evaluations	6,038	7,704	9,582	10,723	11,691	12,207	13,176	13,508	12,174	11,531
New IFSPs	5,524	6,790	8,124	9,509	9,734	9,429	9,871	9,358	8,441	8,594

Years

There was also a drop in 2006.

d. The number of evaluations has also increased each year through 2005, but dropped in 2006 and 2007
e. The number of new families developing their first IFSPs increased significantly each year from 1998 through 2002, leveled out from 2003 through 2005, then dropped in 2006. A small rebound occurred in 2007.

Figure 2 Number of Referrals, Intakes, Evaluations & First IFSPs by Year (Unduplicated Count)



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Referrals	8,341	9,823	12,906	14,793	15,193	15,478	17,242	17,422	16,642	17,317
Intakes	7003	8168	10185	11920	12328	12673	13470	13441	12756	12872
Evaluations	5,233	6,602	7,955	8,772	9,460	9,537	10,127	10,014	9,248	8,737
New IFSPs	5,172	6,340	7,530	8,741	8,903	8,716	9,162	8,679	7,866	8,124

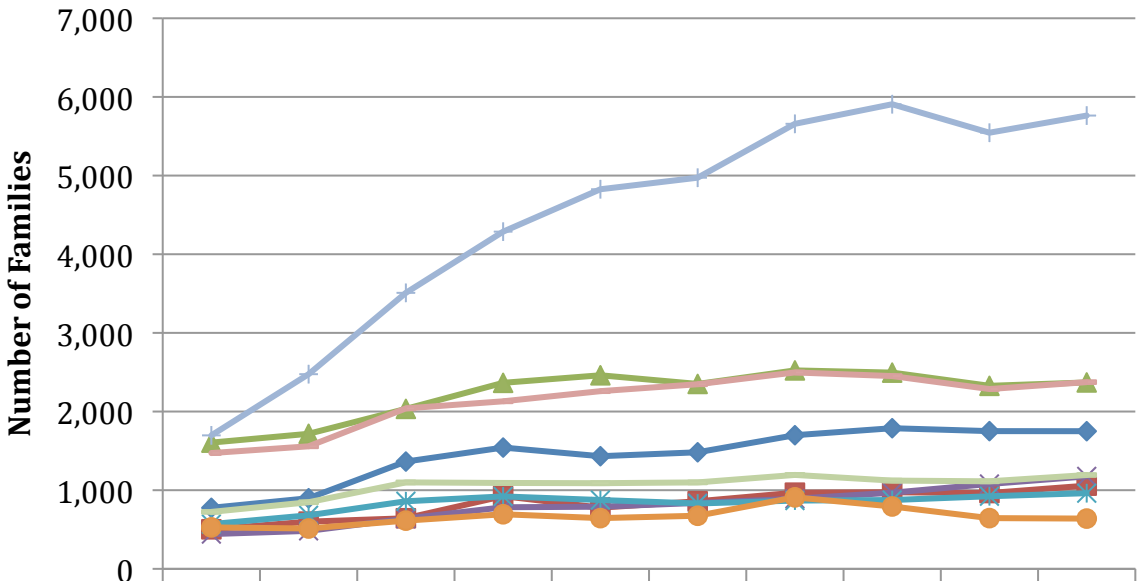
The *average age of children at referral and at the development of their first IFSP* was also computed over this 10-year period. Findings from this analysis indicate that the:

a. Average age of children at referral has not changed over the past 10 years, from 16 months in 1998 to 17 months in 2007.
b. Average age of children at their first IFSP has also varied very little over the past 10 years, from 17 in 1998 to 18 months in 2007.

The frequency of referrals was computed for this 10-year period for each of the nine clusters in Indiana. Figure 3 presents the number of referrals by cluster and by year. Findings from this analysis indicate that:

a. All clusters have demonstrated increases in the number of referrals conducted.
b. Clusters D & G increased the number of referrals by 200%.
c. Clusters A, B, CH, E, I, and J increased the number of referrals by approximately 100%
d. Cluster F demonstrated a 43% increase in referrals.

Figure 3 Number of Referrals by Cluster by Year



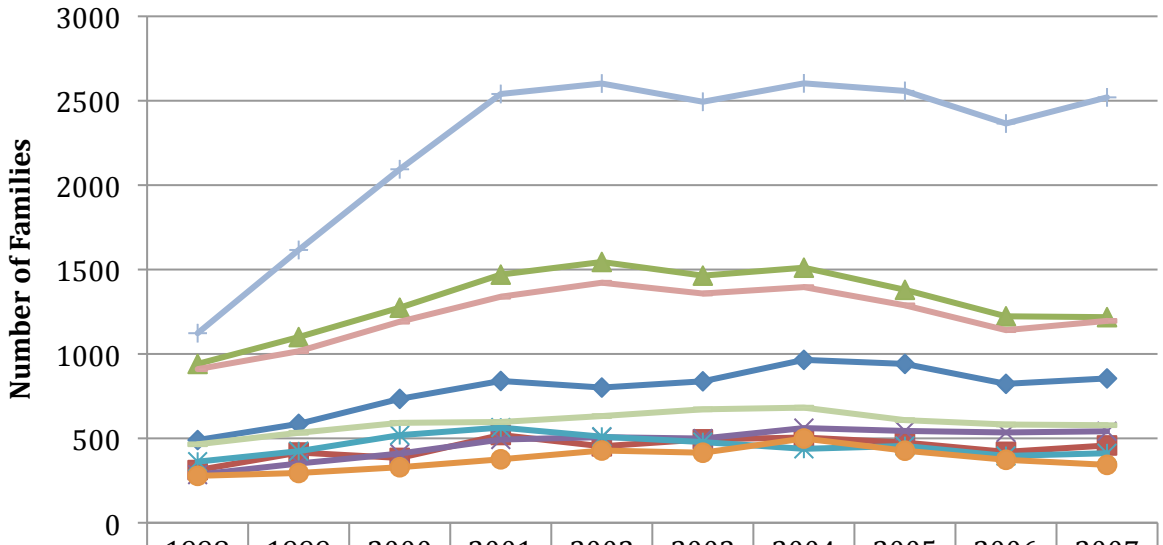
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
A	776	898	1,364	1,542	1,432	1,482	1,699	1,788	1,751	1,750
B	503	600	643	924	778	859	968	974	964	1,058
CH	1,605	1,717	2,034	2,365	2,461	2,351	2,523	2,495	2,327	2,370
D	442	483	639	783	790	838	891	968	1,079	1,176
E	569	681	859	921	875	831	868	875	923	962
F	527	513	613	694	645	675	909	793	645	639
G	1,697	2,475	3,509	4,287	4,826	4,973	5,658	5,907	5,545	5,763
I	1,472	1,558	2,040	2,130	2,259	2,347	2,497	2,451	2,286	2,374
J	724	847	1,099	1,092	1,089	1,099	1,194	1,122	1,113	1,193

Years

The frequency of first IFSPs was computed for this 10-year period for each of the nine clusters in Indiana. Figure 4 presents the number of first IFSPs by cluster and by year. Findings from this analysis indicate that:

a. All clusters have demonstrated increases in the number of first IFSPs.
b. Cluster G experienced a 124% increase in the number of first IFSPs.
c. Clusters A, D, and G experienced increases greater than the state average of a 57% increase in the number of first IFSPs.

Figure 4 Number of Initial IFSPs by Cluster by Year

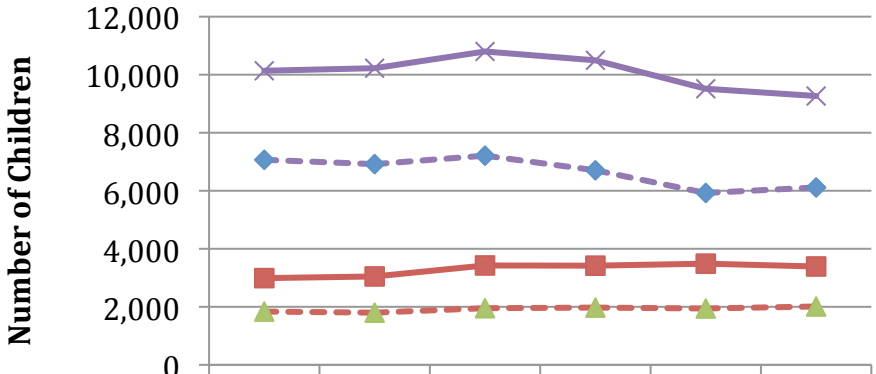


	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
A	490	586	734	840	801	838	965	941	823	855
B	312	416	384	520	453	494	505	475	420	458
CH	941	1100	1274	1470	1545	1464	1511	1380	1223	1218
D	285	351	410	493	507	499	561	544	535	542
E	362	424	519	564	510	478	438	455	396	412
F	278	295	329	376	428	415	499	427	373	343
G	1123	1616	2094	2540	2602	2494	2603	2558	2365	2520
I	910	1016	1191	1339	1422	1358	1396	1288	1141	1196
J	465	533	592	597	632	672	682	608	582	578

The *frequencies of referrals and first IFSPs were computed for children by race from 2002 through 2007*. Figure 5 presents the number of referrals and first IFSPs for white and minority children. Findings from these analyses indicate:

a. The numbers of referrals for children who are white show an increase through 2004, and then a steady decline.
b. The frequency of referrals for children who are a minority show a steady increase.
c. The frequency of first IFSPs for children who are white are relatively flat from 2002 through 2005, and then dip in 2006.
d. The frequencies of first IFSPs for minority children show a slight increase.
e. The proportion of all first IFSPs for minority children grew from 21% in 2002 to 25% in 2007.

Figure 5 Number of Referrals, Intakes, & IFSPs by Year for White & Minority Children



	2002	2003	2004	2005	2006	2007
Referrals (Minority)	2,989	3,046	3,425	3,418	3,487	3,390
IFSPs (Minority)	1,837	1,798	1,952	1,973	1,942	2,011
Referrals (White)	10,136	10,224	10,800	10,495	9,516	9,265
IFSPs (White)	7,066	6,918	7,209	6,705	5,924	6,113

Years

2. What is the number of children determined eligible (before and) after the May 1, 2006 implementation of eligibility criteria?

The number of referrals, evaluations, and first IFSPs occurring one year before and one year after the May 1, 2006 implementation of eligibility criteria. Table 6 presents these comparisons. The first column presents the comparisons, the second column the number of children, and the third column the observed proportions, calculated by dividing the number of children for that row/comparison by the total number of children. Findings from these analyses indicate:

a. There were no significant differences in the numbers of referrals before or after the May 1, 2006.
b. There were differences in the number of evaluations, with 741 fewer evaluations conducted after May 1, 2006.
c. There were differences in the number of first IFSPs, with 783 fewer first IFSPs conducted after the May 1, 2006.

3. What is the impact of the use of the AEPS?

Data analyzing the impact of the AEPS is presented under the following question (#4).

Table 6
Number and Proportion of Referrals, Evaluations, and First IFSPs
Before and After May 2006 Changes in Eligibility

Comparisons	Number of Children	Observed Proportion
Number of Referrals 1 Year Before	16,923	50%
Number of Referrals 1 Year After	16,815	50%
Total	33,738	
Number of Evaluations 1 Year Before	11,382	52%
Number of Evaluations 1 Year After	10,641	48%
Total	22,023	
Number of IFSPs 1 Year Before	8,465	52%
Number of IFSPs 1 Year After	7,683	48%
Total	16,148	

4. What is the number of children determined eligible before and after the implementation of AEPS?

The number of evaluations and first IFSPs occurring one year before and one year after the adoption of the AEPS (October 1, 2006) were computed. It should be noted that this date also corresponds with the statewide adoption of the Eligibility Determination Teams, so results may be confounded. Table 7 presents these comparisons. The first column presents the comparisons, the second column the number of children, and the third column the observed proportions, calculated by dividing the number of children for that row/comparison by the total number of children. Findings from these analyses indicate:

a. There were no significant differences in the number of evaluations before or after the adoption of the AEPS.
b. There were no significant differences in the number of first IFSPs before or after the adoption of the AEPS.

Table 7
Number and Proportion of Evaluations and First IFSPs
Before and After Adoption of the AEPS

Comparisons	Number Children	Observed Proportion
Number of Evaluations 1 Year Before	10,989	51%
Number of Evaluations 1 Year After	10,700	49%
Total	21,689	
Number of IFSPs 1 Year Before	8,132	50.0
Number of IFSPs 1 Year After	7,880	50.0
Total	16,012	

5. Are we seeing more additional evaluations after IFSP (now that only two ED team members go out)?

This question was not answered in this evaluation due to insufficient data. Existing state data only tracks formal evaluations conducted by the ED Team; it does not include the informal, ongoing assessments that providers carry out to guide and adjust their intervention, or to request an adjustment of services. Second, there appears to be some confusion in distinguishing between these two types of assessments and which need prior approval and which do not. Data from the First Steps Survey indicated that some providers reported personal experiences where making a request for a follow-up evaluation/assessment was either discouraged, slow to be approved, or not approved at all. These same providers reported carrying out informal assessments during their service time to gain the information they needed to design an individualized program. From this data, it was determined that there was insufficient information on the number of additional evaluations/assessments conducted, and gathering the needed information would have exceeded the scope of the current evaluation.

6. What is the number of initial IFSP meetings during 2006 and 2007 with no EDT attendance?

Part of the responsibility of the EDT is that at least one member of that team attend the IFSP meeting to share the results of the team's evaluation. An analysis was made of the number and type of providers/EDT members that billed First Steps for attending the first IFSP meeting for every child from 2004 through 2007. Service Coordinators were not included in this analysis. Table 8 presents findings on the number of first IFSP meetings that occurred for a given year, and the percentage of those meetings in which no providers, one provider, or more than one provider attended. The last column provides the mean number of providers attending meetings for that year. Findings from this analysis indicate:

a. The percentage of meetings in which *no providers were present* dropped to a low of 24% in 2005, and then increased to 39% and 37% in 2006 and 2007, respectively.
b. Most meetings were *attended by only one provider*, averaging from a low of 51% in 2004 and 2005 to a high of 59% in 2007.
c. The percentage of meetings in which *more than one discipline was present* (in addition to the service coordinator), dropped from 25% in 2005 to 4% in 2007.
d. The average number of providers attending first IFSP meetings dropped from a high of 1.07 in 2005 to a low of .67 in 2006 and 2007.

Table 8
Number of Providers in Attendance at
First IFSP Meetings

Year	# of IFSPs	0 Providers	1 Provider	2+ Providers	Mean # of Providers
2003	8487	30%	53%	17%	0.9
2004	8872	29%	51%	20%	0.97
2005	8529	24%	51%	25%	1.07
2006	7831	39%	55%	6%	0.67
2007	8414	37%	59%	4%	0.67

Table 9 presents the percentage of meetings attended by the four major service disciplines in First Steps: Developmental Therapists, Occupational Therapists, Physical Therapists, and Speech Therapists. The last column includes all other disciplines in the First Steps system, excluding service coordinators. Findings from this analysis and additional state data indicate that:

a. Developmental Therapists are the most frequent participants at the first IFSP meetings, attending a high of 35% of the meetings in 2005 to a low of 25% in 2007.
b. From 2003 through 2005, there were slight increases in the percentage of meetings attended by all disciplines; this percentage dropped in 2006 and 2007.
c. In February 2006, the state instituted a common reimbursement rate for attending IFSP meetings—a change which resulted in a rate cut for most providers, including the four disciplines highlighted in Table 9. The state's intent was to redistribute finite provider resources and more effectively address the direct service needs of children.

Table 9
Who Attends the Initial IFSP Meetings?

Year	Developmental	Occupational	Physical	Speech	Other
2003	28%	14%	17%	28%	2%
2004	31%	17%	17%	29%	2%
2005	35%	18%	18%	31%	4%
2006	23%	11%	11%	21%	2%
2007	25%	11%	11%	18%	1%

7. What is the number of families that do not initiate the enrollment process once they learn of cost participation?

When families exit First Steps during the enrollment process and before the initial IFSP meeting, the System Point of Entry (SPOE) enters an exit reason. An analysis was conducted of data recorded to identify the number of families who exited by the reason recorded. Table 10 presents the results of this analysis from 2003 (when cost participation was initiated) through 2007 (following increased cost participation requirements for families). Findings presented in Table 10 indicate that:

a. In 2007, 20% of all referrals resulted in families declining or withdrawing from First Steps before the initial IFSP meeting. This proportion of families has remained fairly constant since 2004.
b. Declined to Participate was the most frequent reason recorded across this time period, accounting for 66-68% of all exiting families.
c. Declining because of cost participation, applying for Medicaid, failure to cooperate with the Children with Special Health Care Services, or disclosing insurance information accounted for 33 families exiting in 2006 and 31 families in 2007, less than 1% of all exiting families.

Table 10
Reasons Entered by SPOEs when Families Exited before First IFSP

Family Reasons for Exiting During Enrollment	2003	2004	2005	2006	2007
Declined to Participate at Referral	2477	2844	3059	2965	3058
Whereabouts Unknown	482	636	764	752	783
Withdrawn by Parent After Enrolled	476	539	688	603	496
Failed to Participate in IFSP Services	211	233	144	166	217
Declined to Participate Due to Cost Participation	1	1	9	18	18
Eligible Part B but Family Declined	0	4	16	6	17
Withdrew Due to Cost Participation	2	5	2	9	12
Failure to Apply for Medicaid	1	1	0	3	1
Failure to Cooperate in CSHCS Determination/Re-evaluation of	0	0	0	2	0
Failure to Disclose or Utilize Insurance Benefits	0	0	0	1	0
Total	**3650**	**4263**	**4682**	**4525**	**4602**

8. What is the number of children served overall and the number of children served by county, by cluster, and by level of delay or diagnosis for 2005, 2006 and 2007?

An analysis of child demographic and service data from the Data Warehouse was conducted to determine the *number of children who received services through 2007*.The results are presented in Figure 6, and include the aggregate number of children receiving services in each calendar year. The findings from this analysis indicate:

a. Over the past decade, First Steps has increased the number of children it serves, from a low of 9,685 children in 1998 to a high of 17,850 children in 2004.
b. The number of children served in First Steps increased from 1998 through 2004, then declined 8% from 2005-2006.

Further analyses were conducted to examine the *number of children served by county and by clusters*. Table 11 provides a snapshot of the individual aggregate child counts for all 92 Indiana counties from 2004 through 2007. It also includes the estimated proportion of children served out of the general birth to three population, based on census estimates. Please note that 2007 census data was not available, and is not included in this table.

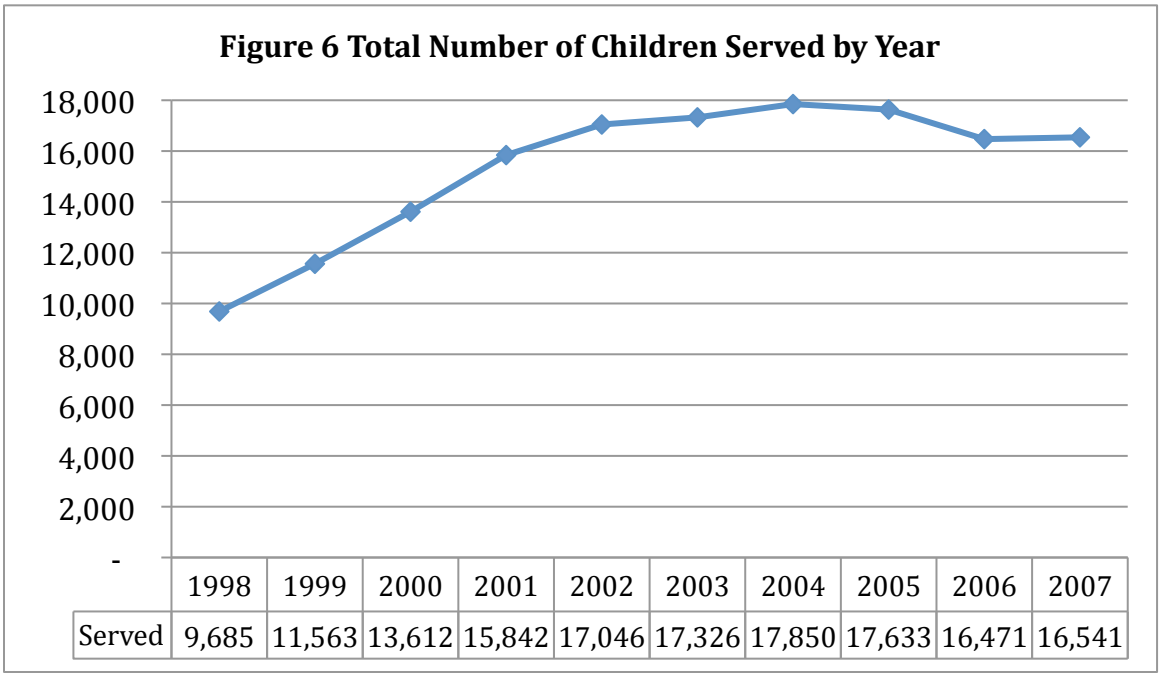


Table 11
Aggregate Number of Children Served by County by Year

County	2004	% of Population	2005	% of Population	2006	% of Population	2007
Adams	65	3.0%	69	3.1%	69	3.1%	65
Allen	1056	5.4%	1129	5.7%	1049	5.3%	959
Bartholomew	289	7.6%	252	6.7%	259	6.8%	287
Benton	18	4.1%	18	4.1%	27	6.0%	25
Blackford	19	3.1%	24	4.1%	21	3.7%	20
Boone	216	8.5%	207	8.2%	193	7.5%	180
Brown	27	4.7%	22	4.1%	23	4.7%	25
Carroll	33	3.6%	35	4.0%	46	5.1%	44
Cass	64	3.0%	63	3.0%	77	3.7%	85
Clark	316	6.4%	298	6.0%	302	6.0%	303
Clay	91	7.0%	85	6.6%	95	7.3%	107
Clinton	116	6.1%	101	5.4%	95	5.1%	92
Crawford	26	5.0%	26	5.0%	27	5.3%	17
Daviess	66	3.7%	64	3.6%	52	2.9%	66
De Kalb	112	5.0%	102	4.5%	92	4.0%	74
Dearborn	82	5.8%	77	5.5%	54	4.0%	60
Decatur	99	4.6%	95	4.4%	77	3.6%	104
Delaware	332	6.7%	257	5.3%	217	4.6%	190
Dubois	97	4.8%	102	5.1%	98	4.8%	113

County	2004	% of Population	2005	% of Population	2006	% of Population	2007
Elkhart	483	4.1%	468	3.9%	476	4.0%	524
Fayette	63	5.4%	72	6.3%	72	6.3%	54
Floyd	264	8.2%	237	7.3%	218	6.6%	210
Fountain	42	5.2%	59	7.4%	50	6.1%	46
Franklin	41	3.9%	39	3.7%	36	3.3%	44
Fulton	40	4.2%	43	4.6%	45	4.9%	52
Gibson	101	6.6%	121	7.8%	100	6.5%	118
Grant	158	5.1%	170	5.6%	153	5.1%	147
Greene	72	4.7%	75	4.9%	66	4.4%	45
Hamilton	1141	8.4%	1114	8.0%	1080	7.7%	1042
Hancock	225	7.8%	234	7.7%	212	6.8%	223
Harrison	95	5.5%	86	5.1%	80	4.8%	74
Hendricks	459	7.8%	454	7.6%	456	7.6%	494
Henry	124	5.9%	117	5.7%	99	4.9%	116
Howard	187	4.3%	202	4.6%	217	5.0%	223
Huntington	124	7.0%	106	6.0%	98	5.5%	103
Jackson	148	6.6%	114	5.0%	104	4.6%	96
Jasper	55	3.6%	59	4.0%	52	3.4%	65
Jay	57	5.0%	55	4.9%	55	4.9%	46
Jefferson	82	6.1%	79	5.8%	91	6.6%	85
Jennings	84	5.7%	81	5.5%	92	6.2%	106
Johnson	459	7.1%	492	7.6%	431	6.5%	442
Knox	81	5.0%	90	5.5%	88	5.2%	84
Kosciusko	191	4.7%	219	5.3%	150	3.8%	122
Lagrange	62	2.3%	66	2.5%	55	2.1%	228
Lake	986	3.8%	1060	4.1%	1079	4.2%	51
La Porte	296	5.9%	276	5.5%	237	4.8%	1022
Lawrence	86	4.1%	83	4.0%	93	4.6%	97
Madison	353	5.8%	319	5.3%	340	5.7%	365
Marion	3141	6.0%	3043	5.7%	2669	4.9%	2742
Marshall	134	5.2%	133	5.2%	118	4.7%	98
Martin	29	6.1%	29	6.2%	26	5.6%	31
Miami	84	5.0%	51	3.1%	57	3.5%	76
Monroe	279	6.1%	268	5.9%	216	4.7%	184
Montgomery	120	6.6%	119	6.7%	93	5.1%	77
Morgan	169	4.9%	156	4.7%	137	4.2%	143
Newton	28	4.5%	36	6.2%	27	4.8%	30
Noble	88	3.4%	99	3.8%	82	3.1%	80
Ohio	11	4.5%	13	5.3%	10	4.1%	7

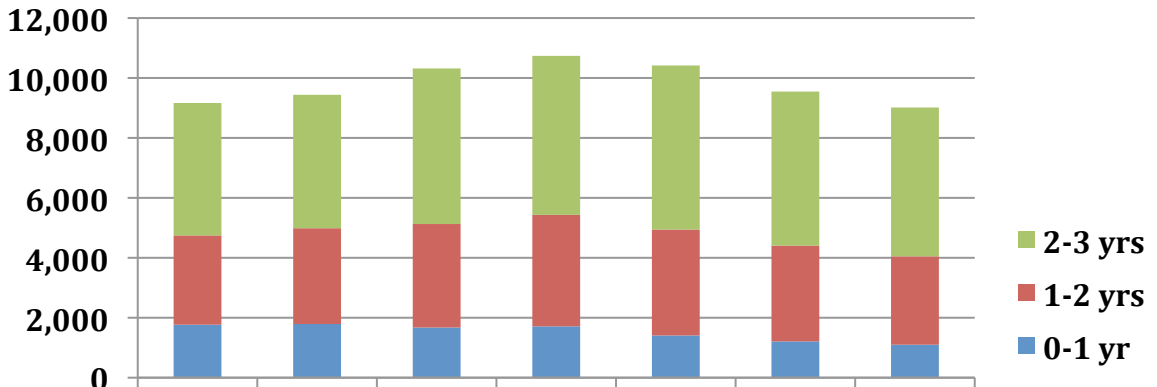
County	2004	% of Population	2005	% of Population	2006	% of Population	2007
Orange	42	4.4%	42	4.4%	31	3.3%	34
Owen	42	4.3%	50	5.3%	50	5.3%	42
Parke	32	4.7%	26	4.0%	21	3.4%	32
Perry	38	4.7%	27	3.3%	18	2.2%	20
Pike	30	5.4%	30	5.4%	29	5.0%	33
Porter	396	5.6%	418	5.9%	381	5.4%	347
Posey	68	6.5%	56	5.4%	45	4.4%	51
Pulaski	27	4.4%	19	3.1%	23	3.7%	24
Putnam	87	5.6%	96	6.3%	105	7.0%	95
Randolph	89	7.3%	70	5.9%	49	4.1%	49
Ripley	61	4.3%	58	4.0%	68	4.7%	65
Rush	40	4.5%	47	5.4%	44	5.4%	45
St. Joseph	747	5.3%	770	5.4%	746	5.3%	720
Scott	61	5.2%	64	5.7%	60	5.4%	70
Shelby	182	8.5%	165	7.6%	158	7.4%	146
Spencer	32	3.6%	30	3.3%	38	4.4%	49
Starke	32	2.8%	30	2.6%	35	3.1%	45
Steuben	84	5.3%	80	5.1%	70	4.5%	61
Sullivan	56	5.9%	63	6.9%	53	6.1%	53
Switzerland	19	4.6%	21	5.1%	17	4.0%	13
Tippecanoe	396	5.5%	406	5.5%	457	6.1%	483
Tipton	52	7.0%	52	6.8%	43	5.6%	31
Union	19	6.1%	17	5.5%	12	3.7%	9
Vanderburgh	445	5.2%	430	5.0%	392	4.5%	481
Vermillion	49	6.5%	48	6.4%	28	3.7%	25
Vigo	238	5.0%	269	5.6%	260	5.4%	279
Wabash	47	3.2%	53	3.7%	45	3.2%	49
Warren	17	4.6%	15	4.3%	10	3.1%	12
Warrick	162	6.4%	149	5.8%	142	5.6%	167
Washington	72	5.5%	71	5.3%	65	4.8%	57
Wayne	222	6.9%	182	5.5%	156	4.7%	160
Wells	69	5.3%	74	5.7%	61	4.7%	66
White	46	3.7%	42	3.3%	45	3.7%	51
Whitley	81	5.1%	95	6.0%	73	4.7%	63

Data on annual December 1 child counts was also collected from the state's annual report to the US Department of Education. This statistic provides a snapshot of the total number of children and families receiving services at any given time. Figure 7 provides the total number of children receiving services on December 1 from 2001 through 2007, further broken down by the age of

children: birth through 1 year, 1 to 2 years, and 2 to 3 years of age. The findings from this analysis indicate that:

a. The number of children served by First Steps at one point in time (December 1) increased to a high of 10,738 in 2004, and steadily declined to a low of 9,014 in 2007.
b. The proportion of children from birth to 1 year of age has slowly decreased each year, from a high of 19% in 2001 to a low of 12% in 2007. The proportion of children from 1-2 years of age has remained fairly constant (33% in 2007). The proportion of children from 2-3 years of age has increased, from 48% in 2001 to 55% in 2007.

Figure 7 December Count of Children Receiving Services by Year and by Age



	2001	2002	2003	2004	2005	2006	2007
2-3 yrs	4,418	4,452	5,191	5,306	5,474	5,139	4,966
1-2 yrs	2,979	3,196	3,453	3,719	3,535	3,197	2,947
0-1 yr	1,768	1,791	1,674	1,713	1,409	1,211	1,101

A look at the annual federal child count data on the IDEAdata.org website, and the Monitoring Center website at Louisiana State University (see Table 12) presents a picture of where Indiana fits nationally. The following chart indicates the percentage of children that received early intervention in Indiana, where Indiana ranks in comparison to other states' percentages and the national average for each year.

Table 12
Indiana's National Ranking on Percentage Served

	% of population	National Rank	National Average
2006	3.66%	7th	2.43%
2005	4.04%	7th	2.4%
2004	4.2%	4th	2.3%
2003	3.35%	7th	2.18%
2002	3.35%	6th	2.16%
2001	3.62%	4th	2.14%

The original Stakeholder question referred to *level of delay or diagnosis* however, state data is recorded according to state *eligibility criteria.* Table 13 presents the *number of children served by state eligibility criteria* from 2003 through 2007.

a. The proportion of children with developmental delays has been steadily increasing and

more than doubled from 2006 to 2007.

b. The proportion of children with medical conditions has decreased; however possible data entry errors (noted below) appear to indicate this finding is not accurate.
c. Very few children are considered eligible under the criteria of informed clinical opinion.

Table 13
Number of Children by Eligibility Category by Year

Eligibility Category	2003	2004	2005	2006	2007
Medical Condition	2924	2305	1595	952	1023
Informed Clinical Opinion	12	25	16	9	43
20% Delay in 2+ Domains[1]	X	X	X	3452	7427
25% Delay in 1 Domain[1]	X	X	X	4015	6829
*15% Delay in 2+ Domains**	4331	5469	6124	2949	357
*20% Delay in 1 Domain**	9596	9759	9717	5005	817
*Biological Risk Factors**	462	292	180	82	37
Total	17325	17850	17632	16464	16533

[1] Established in 2006

*Discontinued in 2006. Children reported in the 2007 column for these categories were those deemed eligible before the change.

When this table was presented to state administrators, they noted that the decline for Medical Conditions did not reflect their data, and might be due to errors in entering the child's eligibility status at the SPOE because of changes in a reporting form that took place in 2006. As a result, the state requested that additional analyses of children's primary diagnoses be conducted to determine if there were data errors. Because children with certain Biological Risk Factors were either no longer eligible or were added to the Medical Conditions category with the 2006 changes in eligibility, these analyses were conducted incorporating the 2006 eligibility changes as they pertained to children with Medical Conditions to insure fair comparisons across the five years. Table 14 presents the number of children by eligibility categories (excluding Biological Risk Factors) by year. The numbers have changed to allow duplicate counts. The results from this table indicate:

a. The number of children with diagnosed Medical Conditions, including children formerly with biological risk factors, is considerably larger than indicated above in Table 13.
b. For this four-year period, 26-31% of the children were eligible because of a diagnosed medical condition; no significant decreases in the proportion of these children are noted.

These new findings confirm there was no decline in the number of children with diagnosed medical conditions; the earlier findings occurred because of the data entry errors transferring the medical diagnosis information to the child's eligibility status.

When considering the issue of eligibility on the national stage, the results from the 2007 Infant & Toddler Coordinators Association (ITCA) Membership survey (38 of 51 Part C coordinators responded) provide some indication of how eligibility is changing in other states. Sixteen percent of Part C coordinators who responded to the ITCA Survey stated that their state has narrowed its

Table 14
Number of Children by Medical Diagnosis by Year

Diagnoses	2003	2004	2005	2006	2007
Medical Condition	5811	5223	4946	4689	4825
20% Delay in 2+ Domains[1]	X	X	X	2583	5875
25% Delay in 1 Domain[1]	X	X	X	3171	5277
*15% Delay in 2+ Domains**	3876	4913	5316	2595	307
*20% Delay in 1 Domain**	9348	9294	8864	4527	700
Total	19035	19430	19126	17565	16984

[1] Established in 2006
*Discontinued in 2006. Children reported in the 2007 column for these categories were those deemed eligible before the change.

eligibility criteria within last the last three years, while 29% indicated their state was discussing narrowing eligibility criteria.

9. What are the income and ethnic breakdowns of children in 2005 compared to 2007?

An analysis of the *income level* of families served in the years from 2003-2007 was conducted. Families at the 0-250% federal poverty guideline represent the poorest families. Families at the 1000+ federal poverty guideline would represent the wealthiest families. Table 15 presents the number of families at each level for 2003-2007 based upon adjusted income levels. First Steps calculates adjustments to the family's income to account for additional and extraordinary medical costs for any member of the household. Results indicate that:

a. Families in the two lowest levels of income (0-350%) represented the largest group served by First Steps—85% of all families in 2007.
b. There was a very small downward trend in the proportion of children served in the six highest income levels.

Table 15
Income Levels of Families Served*

Federal Poverty Guideline	2004	2005	2006	2007
0-250%	10916	11689	11407	11710
251-350%	2653	2563	2135	2021
351-450%	1374	1393	1224	1246
451-550%	691	710	667	615
551-650%	339	351	340	323
651-750%	187	191	168	147
751-850%	79	68	58	54
851-1000%	72	73	56	38
1000%+	58	78	72	63

*Percentage of federal poverty level-Adjusted Income

Analysis of the *ethnic background* of the families First Steps serves was also conducted for this 5-year period. Table 16 presents the results of this analysis. The findings indicate that:

a. The largest number of children served is White/Not Hispanic, representing 80% of all families in 2003 to 76% of all families in 2007.
b. The proportion of children who are minorities has increased from 20% of all children in 2003 to 24% of all children in 2007.

c. Children who are Hispanic represent the fastest growing ethnic group, rising from 4.9% of the population in 2003 to 7.3% in 2007.

Table 16
Ethnicity of Children Served by First Steps from 2003-2007

Race	2003	2004	2005	2006	2007
African American	1679	1773	1710	1601	1712
American Indian	26	34	28	21	14
Asian/Pacific Islander	246	241	233	220	192
Hispanic	848	907	1004	1069	1212
Multi-Racial	723	806	832	814	792
White/Not Hispanic	13804	14088	13825	12746	12619

10. Is there a significant difference in the number of children served in each cluster, adjusted for population?

Table 17 provides information concerning the number of children receiving First Steps services in each of the nine clusters over the past four years. Table 17 also presents the proportion of the birth to three population served from 2004 through 2006, based on census data. At the time of the analyses, census data was not available for 2007. The data presented in this table indicates:

a. The populations across the nine clusters differ greatly, with clusters varying based on their demographic makeup.
b. From 2004 to 2006, the proportion of children served by First Steps has decreased.
c. From 2004 to 2006, Clusters D, F, and J have closely paralleled the state average; Clusters A, B, and E have been below the state average; and Clusters G and I tend be above the state average.

Table 17
Number of Children Served by Cluster

Cluster	2004		2005		2006	
	Count	% of Pop.	Count	% of Pop.	Count	% of Pop.
A	1761	4.7%	1849	5.1%	1776	4.5%
B	942	4.1%	940	4.2%	886	3.9%
CH	2918	5.7%	2836	5.5%	2614	4.9%
D	1068	5.1%	1065	5.2%	1093	5.2%
E	900	4.3%	920	4.2%	843	4.1%
F	843	5.3%	895	5.6%	844	5.1%
G	5421	6.9%	5311	6.7%	4816	6.1%
I	2685	5.9%	2610	5.6%	2451	5.1%
J	1308	5.3%	1202	5.0%	1140	4.8%
State	17846	5.3%	17628	5.2%	16463	4.9%

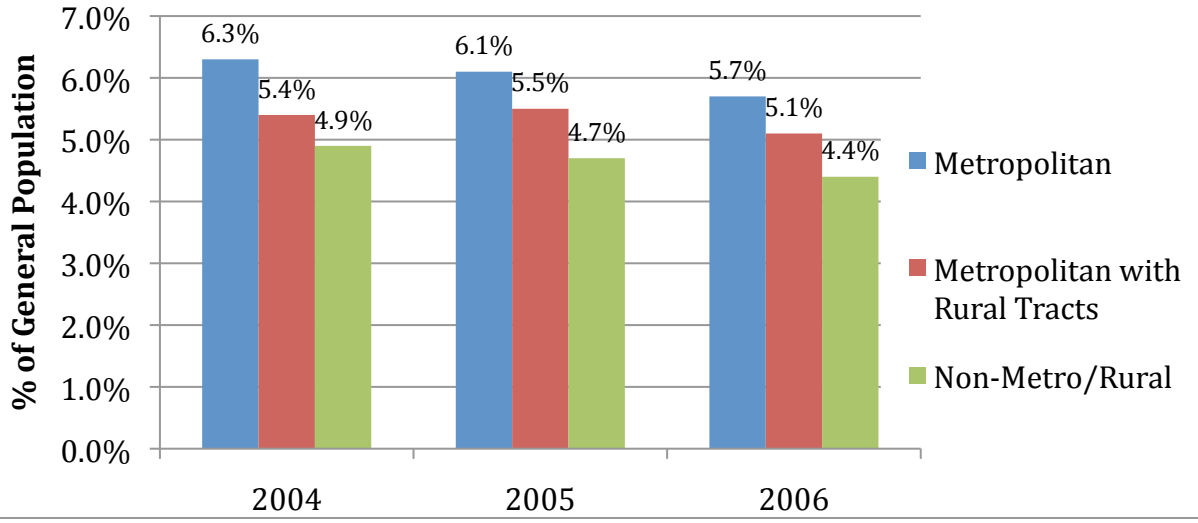
11. Are we serving a good demographic cross section of eligible children or are there pockets of need (e.g. sufficient services for children in very rural and urban areas)?

The data presented above in Table 17 suggests there may be areas of the state that are underserved. The numbers for Clusters A, B, and E are below the state average and other

clusters. To investigate further differences due to demographic factors, counties were examined based upon the Indiana State Department of Health's determination of rural, metro-rural, and metro-urban distinctions. The average percentage of the population served by counties in each of these three demographic groups was examined to see if there were any major differences. Figure 8 summarizes this information over time and provides the state averages.

a. Metro/urban counties serve, on average, a higher percentage of the birth to three population than counties in the other two categories.
b. Rural counties serve, on average, a significantly smaller percentage of their birth to three population as compared to counties in the other two categories.

Figure 8 Proportion of Birth - 3 Population Served by County Type



c. While not conclusive, this data does suggest that there are pockets of the state that may not be reaching all eligible children.

Table 18
Counties Serving Low Proportion of B-3 Children

County	2004	2005	2006
Adams	3.2%	3.3%	3.1%
Daviess	4.1%	3.9%	3.0%
Dearborn	3.8%	3.6%	2.4%
Lagrange	2.6%	2.6%	2.2%
Noble	3.8%	4.2%	3.6%
Starke	3.4%	3.2%	3.2%
Wabash	3.7%	4.1%	3.5%
White	4.0%	3.6%	3.9%
State Average	**5.3%**	**5.2%**	**4.9%**

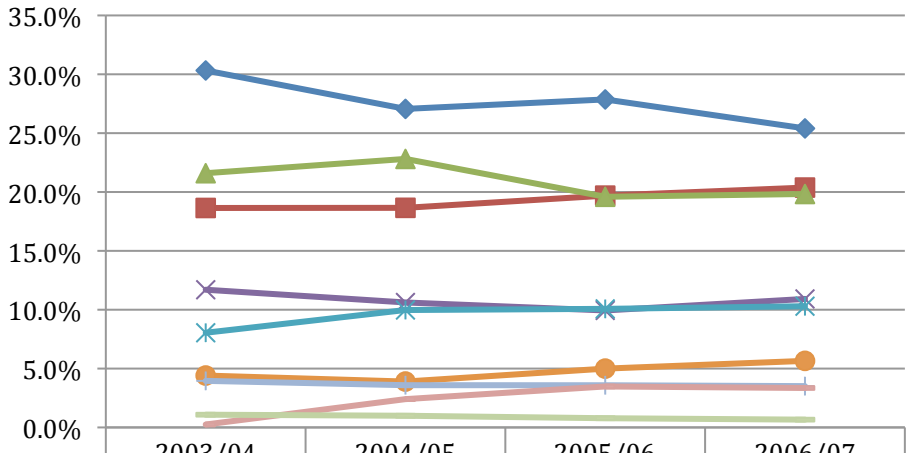
Table 18 highlights counties that have consistently served a lower proportion of children as compared to state averages.

12. What are the numbers of families leaving the program due to cost participation?

Similar to the data presented earlier regarding the number of families declining services at enrollment, the state collects data on all children when services are *terminated*. This data includes the date of termination and the cause. A summary of the analyses of this data is presented in Figure 9. This data shows the percentage of children and families who exit First Steps by *reason for termination* from 2003/04 through 2006/07. This data was taken from the annual data reports provided by the state to the US Department of Education. Results indicate that

a. Historically, the primary reason children and families exited First Steps was that the child was no longer eligible for services—all developmental concerns were addressed. This has been steadily declining over the past four years.
b. In 2007, 20.4% of all children exited due to families withdrawing from services, the second highest reason for children exiting that year. This follows a 9% increase over the four-year period.
c. Other state data not depicted in this table indicate that less than 1% of the families withdraw indicating cost participation as the reason.
d. In comparison with national data, Indiana had the second highest exit rate due to family withdrawals in the nation, double the national rate (10.5%).

Figure 9
Number of Children Exiting First Steps Services by Reason



	2003/04	2004/05	2005/06	2006/07
Complete prior to age three	30.3%	27.1%	27.9%	25.4%
Withdrawal by Parent	18.6%	18.7%	19.7%	20.4%
Part B eligible	21.6%	22.8%	19.6%	19.8%
Referrals to other programs	11.7%	10.6%	9.9%	10.9%
Atttempts to contact unsuccessful	8.0%	10.0%	10.1%	10.3%
Exit with no referrals	4.4%	3.9%	5.0%	5.7%
Moved out of state	4.0%	3.6%	3.6%	3.5%
Part B eligibility not determined	0.2%	2.4%	3.5%	3.4%
Deceased	1.1%	1.0%	0.8%	0.7%

2. What impact have changes in First Steps had on the types and amount of services children and families receive from First Steps?

The Stakeholder Committee identified three specific questions that focused on the services children and families received from Indiana's First Steps system. These three questions included:

1. Are children receiving services that are recommended (recommended versus availability of that provider in the area)?
2. Are recommendations being made based on provider availability?
3. Are children with comparable diagnoses and delays receiving comparable levels of services/expenditures by cluster?

1. Are children receiving services that are recommended (recommended versus availability of providers in the area)?

An analysis was made to determine what percentage of the children received the services that were initially authorized at the first IFSP. Initial authorization data was used as it is recorded in the state data tracking system. This authorization data reflects the final recommendations of the IFSP Team, including the family, the ED Team member, and the intake/ongoing service coordinator. Alternative recommendations from the EDTs and ongoing service providers are not electronically recorded. Table 19 presents information concerning the frequency with which services were initially authorized for children entering First Steps in 2007. Results presented in this table indicate:

a. The four most frequently authorized services for children entering First Steps in 2007 were Developmental, Occupational, Physical, and Speech Therapy.
b. All other early intervention services were authorized infrequently.

Table 19
Percent of Children Initially Authorized
to Receive Early Intervention Services in 2007

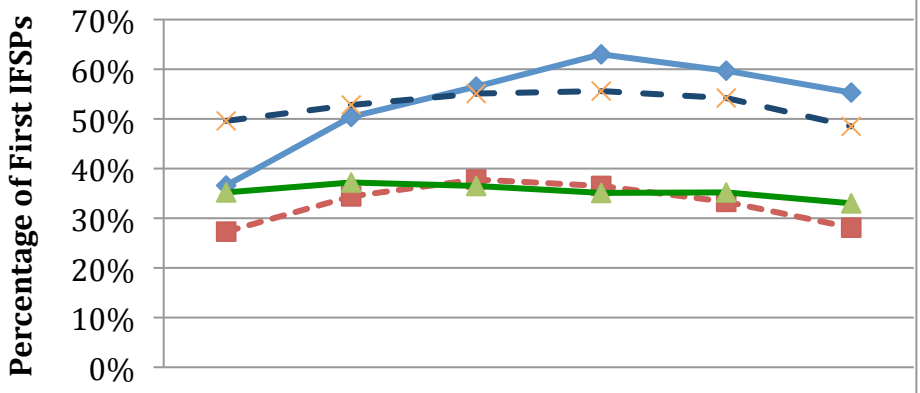
Services	% of children	Services	% of children
Assistive Technology	<1%	Other Related Services	<1%
Audiology	4%	Physical Therapy	38%
Developmental Therapy	55%	Psychology	<1%
Interpreter Services	<1%	Social Work	<1%
Nursing	<1%	Speech Therapy	49%
Nutrition	<1%	Vision	<1%
Occupational Therapy	38%		

Given the frequency with which developmental, occupational, physical, and speech therapy is authorized for children, further analyses were made to examine their rate of authorization over a five-year period. Figure 10 presents the results of this analysis. The trends presented in Figure 10 indicate:

a. In 2002, speech therapy was the most frequently authorized service.

b. Over time, developmental therapy became the most frequently authorized service, beginning in 2004 and continuing through 2007.
c. From 2005 to 2007, there was a small decline in the percentage of children initially authorized to receive all four of these early intervention services. The decreases ranged in magnitude from 2% for physical therapy to 8% for developmental therapy. Occupational Therapy dropped 5% and Speech Therapy dropped 7%.

Figure 10
Percentage of Children Authorized to Receive Services



	2002	2003	2004	2005	2006	2007
Developmental Therapy	37%	50%	57%	63%	60%	55%
Occupational Therapy	27%	34%	38%	37%	33%	28%
Physical Therapy	35%	37%	37%	35%	35%	33%
Speech Therapy	50%	53%	55%	56%	54%	49%

Simple comparisons were conducted to look at the percentage of initial authorizations made before and after the May 2006 and October 2006 policy changes affecting eligibility, EDTs and the use of the AEPS. Table 20 presents the results of these comparisons. The results indicate:

a. There were differences in the percentage of children authorized to receive all four services before and after the May 2006 and October 2006 policy changes.
b. There was a decline in the percentage of children initially authorized to receive services following both dates.
c. The percentage decline was greatest for developmental therapy (9%) and smallest for physical therapy (2%) for both dates.

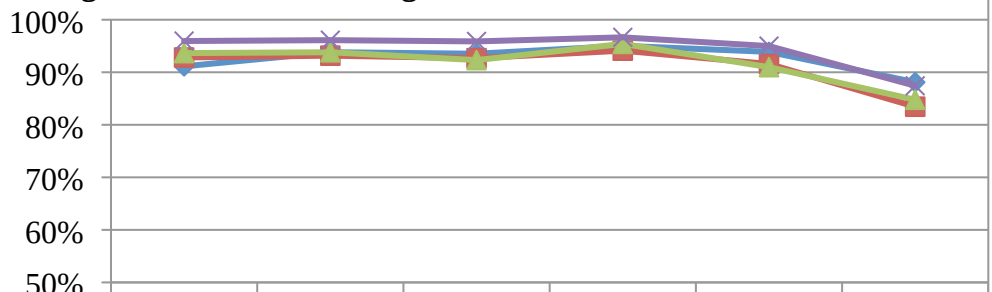
Table 20
Impact of Policy Changes on Services Initially Authorized

Service	Before May 2006	After May 2006	Before Oct 2006	After Oct 2006
Developmental Therapy	64%	55%	63%	52%
Occupational Therapy	37%	30%	35%	27%
Physical Therapy	36%	34%	35%	33%
Speech Therapy	57%	51%	57%	49%

For children who were initially authorized one or more of these four major early intervention services, additional analyses were conducted to determine the percentage that received services. These analyses were done for children who had exited First Steps to insure that all services had been billed and paid. Figure 11 presents the results from these analyses. The results presented in this figure indicate:

a. From 2002 through 2006, 91-97% of children received authorized services.
b. In 2007, there was a drop in the percentage of children receiving the services initially authorized, ranging from 9% for Occupational Therapy to 6% for Developmental and Physical Therapy services.
c. It should be noted that the 2007 figures does not include complete data on services provided and billed, particularly for children who began First Steps toward the end of the year (October 2007 through December 2007). There are delays from the time the service is provided, when it is billed, and when it is captured as a service that was paid.

Figure 11
Percentage of Children Receiving Authorized Services



	2002	2003	2004	2005	2006	2007*
Developmental Therapy	91%	94%	94%	95%	94%	88%
Occupational Therapy	93%	93%	93%	94%	92%	83%
Physical Therapy	94%	94%	92%	95%	91%	85%
Speech Therapy	96%	96%	96%	97%	95%	87%

***Incomplete billing data for 2007**

In addition to the authorization data recorded by the state, First Steps providers, including current EDT members and ongoing service coordinators were asked to identify the percentage of the children they were serving that received recommended levels of services. The results from this survey item indicated:

a. All providers (N=963) indicated that, on the average, 86% of the children they saw were receiving the recommended levels of services.
b. Current service coordinators and EDT members (N=291) also indicated that, on the average, 86% of the children they saw were receiving the recommended levels of services.

Additional analyses were conducted to determine the average number of services authorized and provided for children from 2003 through 2007, and who had exited. Table 21 presents the results of those analyses. Findings from this table indicate:

a. From 2003 to 2007, an average of two services were authorized per child, with a slight dip in 2007.
b. From 2003 to 2006, averages of three services were received per child. This dipped to two services in 2007.
c. It should be noted that the 2007 figures does not include complete data on services provided and billed, particularly for children who began First Steps toward the end of the year (October 2007 through December 2007). There are delays from the time the service is provided, when it is billed, and when it is captured as a service that was paid.

Table 21
Average Number of Services Authorized and Paid for Children Entering First Steps from 2003 – 2007

First IFSP Year	Average Number of Services Authorized	Average Number of Services Provided
2003	1.9	2.8
2004	2.0	2.8
2005	2.0	2.8
2006	1.9	2.6
2007	1.7	2.2*

*Incomplete billing data for children entering late in the year

2. Are recommendations being made based on provider availability?

As part of the First Steps Provider Survey, current service coordinators and EDT members were asked to assess the extent to which various factors influenced service recommendations of initial IFSPs over the past three months. Table 22 presents the average percentage of initial IFSPs influenced by each of four factors. The results indicate:

a. IFSP Team recommendations influenced, on the average, 65.7% of the service recommendations for new children entering First Steps.

Table 22
Factors that Influence Service Recommendations of Initial IFSP

Influences	Percentage of Recommendations
IFSP Team Recommendations	65.7%
ED Team Recommendations	57.8%
Availability of Providers	47.1%
Direct Service Provider Recommendations	33.9%

b. ED Team recommendations also influenced services recommendations for a majority of entering children (57.8%).
c. *Availability of providers* was an influence for an average 47% of the service recommendations for entering children.
d. *Direct service providers* were an influence for an average of 34% of recommendations.

When current service coordinators and ED Team members identified *provider availability* as a factor influencing service recommendations, they were asked to indicate the percentage of children receiving all, some, or none of the needed services. Results from that part of the survey indicated that when provider availability was an influential factor:

a. 58% of children received all recommended services.
b. 37% of children received some services.
c. 5% of the children received none of the recommended services.

A final related question on the First Steps Provider Survey was to determine what happens when providers are not available to provide the recommended service. Results from that survey question indicate:

a. Approximately 72% of the respondents indicated that *another service was substituted* (usually developmental therapy).
b. Less frequently, children waited for the recommended service or received a reduced level of services.

3. Are children with comparable diagnoses and delays receiving comparable levels of services/expenditures by cluster?

An analysis was made of the average number of hours of service children received each month, from 2004 through 2007, disaggregated by cluster and the child's eligibility. The average hours of service computed includes all direct ongoing services except service coordination, assessment, and IFSP meetings. Table 23 presents the results from this analysis, including the nine clusters and the average number of hours/month of service children received in 2004 through 2007. Findings from this table indicate:

a. Since 2005, the average number of hours of service children have received statewide has decreased about one hour.
b. Children in Cluster CH generally receive more hours of service, on average.
c. Children in Clusters B and D generally receive fewer hours of service, on the average.

Table 23
Average Hours/Month of Service Per Child by Cluster

Cluster	2004	2005	2006	2007
A	5.5	5.9	5.3	5.1
B	4.7	5.4	5.1	5.0
CH	5.4	6.8	5.9	5.4
D	5.2	5.5	4.7	4.6
E	4.5	5.3	5.2	5.1
F	5.4	5.4	5.4	5.2
G	5.6	6.2	5.5	5.1
I	5.2	5.9	5.4	5.3
J	5.5	6.3	5.5	5.1
State	**5.3**	**6.0**	**5.4**	**5.1**

Table 24 provides the average hours of service per month per child by diagnosis across all nine clusters for 2007. The first column provides the average hours of service per month for all children; and the second and third columns break this down by the two major eligibility categories. Results presented in this table indicate:

a. For all children, average amount of service per month ranged from a low of 4.6 hours for Cluster D to a high of 5.45 hours for Cluster CH.
b. For children with diagnosed medical conditions, the ranges are a little greater, with a low of 5.5 hours for Cluster D to a high of 6.5 hours in Cluster CH.
c. For children with developmental delays, the range is from a low of 4.2 hours for Cluster D to a high of 5.2 hours for Cluster A.

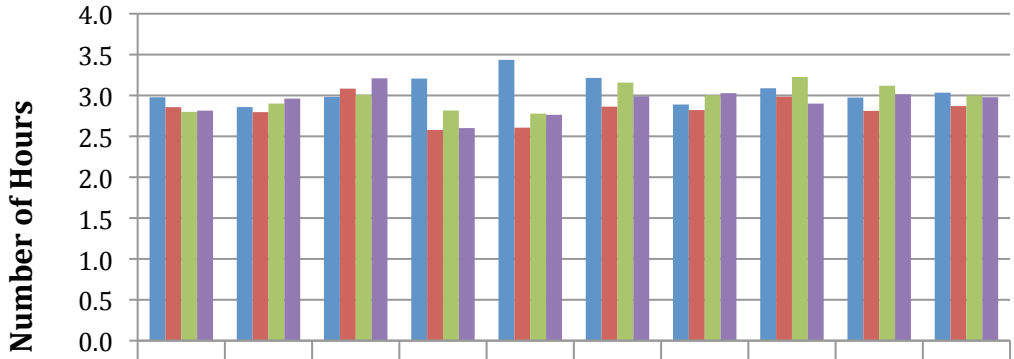
Table 24
Hours/Month of Service by Cluster and by Diagnosis in 2007

Cluster	All Children	Medical Condition	Develop. Delay
A	5.1	5.9	5.2
B	5.0	6.2	4.8
CH	5.4	6.5	5.1
D	4.6	5.5	4.2
E	5.1	5.6	4.9
F	5.2	5.8	5.0
G	5.1	5.9	5.0
I	5.3	6.3	5.0
J	5.1	6.5	4.8
State	**5.1**	**6.1**	**5.0**

This data was further disaggregated to examine the average amount of services children received, on average, for each of the four major types of service: developmental, occupational, physical, and speech therapy. Figure 12 presents this analysis, organizing the four types of service per cluster for 2007. The columns on the far right represent the state averages. Results presented in this figure indicate:

a. There are minor differences among the four service types for Clusters A, B, CH, F, G, I, and J.
b. In Clusters D and E (populated largely by rural counties), the average number of hours of service per month for developmental therapy is higher than the other three service types, which are lower than the state average.

Figure 12 Average Hrs/Mo by Service Across Clusters



	A	B	CH	D	E	F	G	I	J	State
Developmental	3.0	2.9	3.0	3.2	3.4	3.2	2.9	3.1	3.0	3.0
Occupational	2.9	2.8	3.1	2.6	2.6	2.9	2.8	3.0	2.8	2.9
Physical	2.8	2.9	3.0	2.8	2.8	3.2	3.0	3.2	3.1	3.0
Speech	2.8	3.0	3.2	2.6	2.8	3.0	3.0	2.9	3.0	3.0

Clusters

3. What impact have changes in First Steps had on the costs of providing services?

The Stakeholder Committee identified eight specific questions that focused on the costs of First Steps, including services, average costs per children, administrative costs, and family cost participation. These questions included:

1. What are the total First Step Expenditures in 2005, 2006, and 2007? (*And what is the cost per child for each year excluding SC costs?)*
2. What amount of money has been spent on direct services by discipline in 2005, 2006, and 2007 adjusted for eligibility changes?
3. What is the average cost of services per discipline?
4. Average cost per child further refined to reflect average cost for severity of disability 2005-2007.
5. What is the SPOE cost compared for 2005, 2006, and 2007?
6. What are the income levels of families to determine how families are being impacted by cost participation?
7. Does the average cost per child differ by income category of family?
8. What percent of the amount billed to the parent is collected by the state?

1. What are the total First Step Expenditures in 2005, 2006, and 2007? (And what is the cost per child for each year excluding SC costs?)

An analysis of billing data for all children receiving services from 2004 through 2007 was conducted to determine total service expenditures, excluding service coordination. Figure 13 presents this information concerning direct service expenditures for First Steps. The results presented in Figure indicate:

a. From 2004 through 2007, total annual service expenditures decreased 13%.
b. This decrease closely parallels the trend in enrollment that took place over this same period.
c. The decreases also include both the service rate cuts, which took place in 2004, and the IFSP meeting rate cuts that took place in 2006.

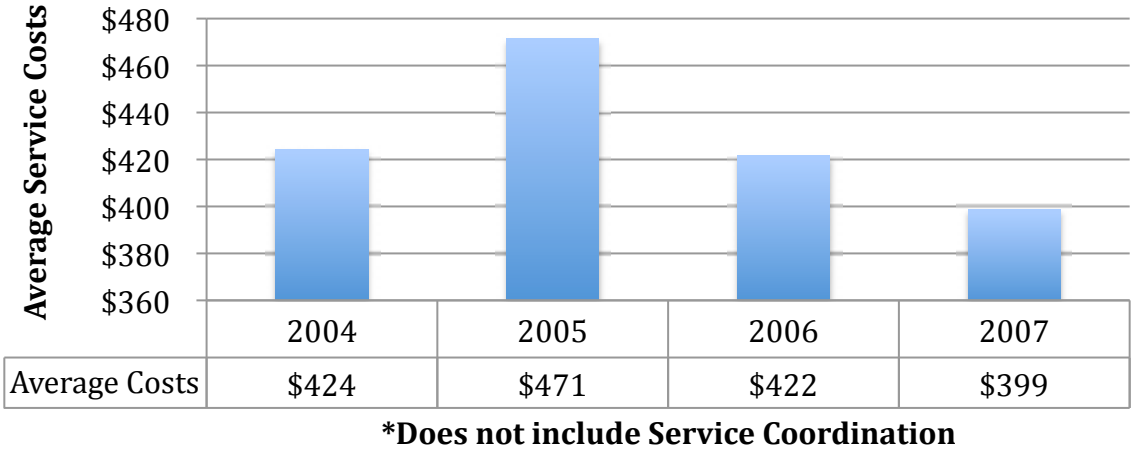
Figure 13 Total Expenditures from 2004-2007

	2004	2005	2006	2007
Direct Services	$50,082,271	$48,710,893	$44,528,527	$43,396,172

The average monthly cost for services per child for each of these four years was also calculated. Monthly versus annual costs were used because total costs vary among children depending on the number of months a child is in First Steps. Figure 14 presents the average monthly costs per child for services for the four years, not including service coordination. The results presented in this figure indicate:

a. Average monthly service costs per child decreased 15% from 2005 ($471/month) to 2007 ($399/month).
b. These figures include the service rate cuts, which took place in 2004.

Figure 14 Average Monthly Service* Costs Per Child from 2004-2007



	2004	2005	2006	2007
Average Costs	$424	$471	$422	$399

***Does not include Service Coordination**

2. What amount of money has been spent on direct services by discipline in 2005, 2006, and 2007 adjusted for eligibility changes?

Analyzing the same billing, overall direct expenditure costs were disaggregated across services by discipline for 2004 through 2007. Table 25 presents the amounts spent on each of the 14 early intervention services for all children across the four-year period. Services expenditures from 2004 and on would include the service rate cuts. These expenditures include direct services. Please note that multiple analyses have found some variations in the actual costs per discipline per year. Because of this variation, please use caution in viewing specific figures. The reader is encouraged to view the overall trends presented in this table. The results presented in Table 25 indicate that:

a. Expenditures in all service disciplines decreased during this four-year period except Developmental Therapy. Developmental Therapy increased 14%.
b. The amount spent on Speech Therapy was more than all other disciplines for each year.
c. From 2004 through 2007, the amount spent on Developmental Therapy surpassed the amounts spent on all other services, except for Speech Therapy.

Table 25
Amount Spent[1] on Direct Services by Discipline*

Discipline	2004	2005	2006	2007	% Change
Audiology	$344,582	$313,131	$246,407	$244,002	-29%
Developmental Therapy	$9,262,590	$10,754,827	$10,803,057	$10,547,629	14%
Interpreter Services[2]	$26,910	$38,490	$26,368	$16,874	-37%
Medical	$208	$0	$50	$17	-92%
Nutrition	$439,173	$403,001	$306,986	$278,442	-37%
Other Related Services	$28,689	$21,184	$8,446	$5,428	-81%
Occupational Therapy	$10,634,634	$10,210,550	$9,016,879	$8,940,720	-16%
Psychological Services	$513,224	$468,561	$351,177	$376,102	-27%
Physical Therapy	$12,561,110	$11,621,249	$10,636,008	$10,502,574	-16%
Nursing	$44,596	$38,077	$32,896	$28,422	-36%
Speech Therapy	$16,002,967	$14,614,271	$12,891,247	$12,231,932	-24%
Social Work	$116,802	$103,043	$100,023	$74,740	-36%
Transportation	$5,022	$2,497	$848	$559	-89%
Vision Services	$76,708	$92,919	$70,171	$37,566	-51%
Total	**$50,082,271**	**$48,710,893**	**$44,528,527**	**$43,396,172**	-13%

[1]Rate Cut for Service Reimbursement took place in 2004
[2]Beginning April 2006, SPOEs were required to maintain Spanish-speaking staff, minimizing the need for interpreters
* Please use caution in reviewing the specific costs per discipline and year. Variations in the numbers from different analyses of this data have been found.

Table 26
Average Monthly Costs/Child[1] for Services by Discipline

Discipline	2004	2005	2006	2007	%
Audiology	$79	$77	$80	$78	-1.3%
Developmental Therapy	$172	$181	$188	$189	9.9%
Interpreter Services	$78	$85	$82	$77	-1.3%
Nutrition	$100	$95	$91	$91	-9.0%
Other Related Services	$92	$77	$64	$46	-50.0%
Occupational Therapy	$242	$240	$238	$245	1.2%
Psychological Services	$263	$253	$250	$257	-2.3%
Physical Therapy	$265	$262	$259	$265	0.0%
Nursing	$158	$136	$68	$82	-48.1%
Speech Therapy	$241	$231	$227	$230	-4.6%
Social Work	$113	$114	$92	$112	-0.9%
Vision Services	$111	$133	$145	$139	25.2%

[1]Rate Cut for Service Reimbursement took place in 2004

3. What is the average cost of services per discipline?

The data used in Question #2 above was further disaggregated to calculate the average monthly costs per child

for each service. The average costs per discipline are based only on the children receiving those services—not all children enrolled in the First Steps system for a given month or year. Table 26 presents the average monthly costs for the major early intervention services from 2004 through 2007, which reflect the 2004 rate cut to service providers. The results presented in this table indicate that:

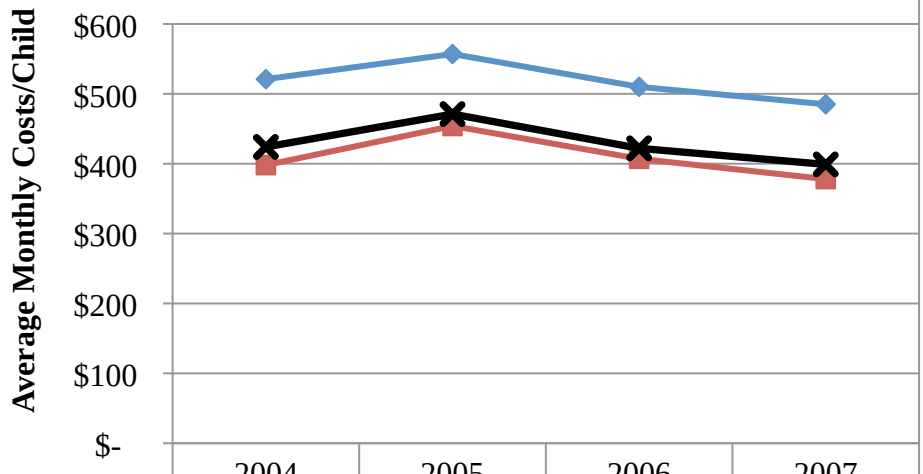
a. On average, monthly service costs increased for Developmental and Occupational Therapy and Vision Services during this four-year period—all other services were flat or saw a decrease.
b. In 2007, the highest average monthly costs was for children receiving physical therapy services at $265, followed by psychological services at $257, occupational therapy services at $245, and speech therapy services at $230.

4. Average cost per child further refined to reflect average cost for severity of disability 2005-2007.

Further analysis of the billing data was conducted to examine the average monthly costs for services by eligibility status over the four-year period. The current eligibility status for First Steps services includes children with developmental delays and children with medical conditions. Figure 15 presents the results of this analysis. The results indicated that:

a. Children with developmental delays closely parallel the state average line, reflecting the majority of children in First Steps.
b. Children with medical conditions typically cost over $100 per month more than children with developmental delays across all four years.

Figure 15 Average Monthly Service Costs Across Eligibility Categories



	2004	2005	2006	2007
Medical Condition	$521	$557	$510	$485
Developmental Delay	$398	$454	$407	$378
State Average	$424	$471	$422	$399

5. What is the SPOE cost compared for 2005, 2006, and 2007?

Financial and state contract data was provided by the state administration to analyze the costs of the System Point of Entries (SPOE). Table 27 presents a summary of the costs of the nine SPOEs, and includes a breakdown of their contract costs over the four contract years. The results presented in Table 27 indicate that:

a. Overall contract amounts with the SPOEs have increased over the past four years.
b. In 2006/07 and 2007/08, contracts with the SPOEs increased significantly as the costs of service coordination were moved to the SPOEs.

Table 27
System Point of Entry Costs from 2004-08

	4/04-3/05	4/05-3/06	4/06-3/07	4/07-3/08
SPOE Costs	$6,029,151	$5,956,182	$4,558,955	$4,654,957
Local Planning and Coordinating Council	$1,328,792	$1,328,792	$1,328,792	$1,328,792
Service Coordination Costs	$3,720,627*	$6,364,294	$6,934,539	$7,400,000
Total	**$11,078,570**	**$13,649,268**	**$12,822,286**	**$13,383,749**

*Calendar Year Figures

6. What are the income levels of families to determine how families are being impacted by cost participation?

Table 28
Cost Participation Rates for Families Receiving First Steps Services

% Federal Poverty Level	Co-Pay per Service	Monthly Maximum Co-Pay
0% - 100%	$0.00	$0.00
101% - 250%	$0.00	$0.00
251% - 350%	$3.00	$24.00
351% - 450%	$6.00	$48.00
451% - 550%	$15.00	$120.00
551% - 650%	$25.00	$200.00
651% - 750%	$50.00	$400.00
751% - 850%	$75.00	$600.00
851% - 1000%	$100.00	$800.00
1001% and Higher	$120.00	$960.00
Declined to Disclose/ Paying Full Fee	$120.00	$960.00

The First Steps program implemented cost participation requirements for families beginning in 2003. In 2006, First Steps increased cost participation requirements, lowering the income level at which families must pay, as well as the requirement to access health insurance benefits. Co-pays are based on an adjusted family income that takes into account existing household medical expenses, child care costs related to disability; and then follow the current Federal Poverty Guidelines. Table 28 provides the amount families are billed per service, and the maximum amount they can be billed for all services in a given month.

Several analyses were made to determine if there were differences in the types and amounts of services received by families

across the different income levels. These analyses included the following data: the number of families entering First Steps, the number of families declining or withdrawing from First Steps, the average number of hours of service per month families received, and the average expenditures/costs per child.

Table 29 presents the results from looking at the proportion of families entering First Steps across the nine income levels from 2004 through 2007. The results presented in this table indicate that:

a. Across all four years, the majority of families entering First Steps were in the *0-250% Federal Poverty Level* of income.
b. The percentage of families at the 0-*250%* Federal Poverty Level increased 1% while the percentage of families at the 251-350% level decreased 1%, possibly reflecting the work Service Coordinators did in assisting families to claim additional deductions to adjust their family income level and cost participation.
c. The proportions of families entering First Steps in all other income levels were constant.

Table 29
Proportion of Families Entering First Steps by Income Level from 2004-07

	Federal Poverty Levels								
Year	**0-250%**	**251-350%**	**351-450%**	**451-550%**	**551-650%**	**651-750%**	**751-850%**	**851-1000%**	**> 1000%**
2004	68.3%	14.9%	8.6%	3.8%	2.0%	1.2%	0.4%	0.5%	0.4%
2005	68.6%	14.0%	8.0%	4.6%	2.2%	1.1%	0.4%	0.4%	0.5%
2006	71.4%	12.4%	7.5%	4.3%	2.2%	1.0%	0.4%	0.3%	0.4%
2007	69.8%	13.4%	8.7%	3.9%	2.2%	1.0%	0.4%	0.3%	0.4%

The proportion of families declining First Steps at enrollment by family income level was not calculated due to insufficient data. The majority of families who decline during the enrollment process do not provide income data.

The proportion of families withdrawing from First Steps services by family income level was calculated. Table 30 presents the percentage of families leaving First Steps for the 2004-07 periods by family income level. Results from this table indicate:

a. From 2004 to 2007, there is a 10% increase in the proportion of families at the *0-250%* Federal Poverty Level leaving First Steps.
b. This 10% increase is offset by declines in the proportion of families in the next four income levels.
c. The four highest income levels remained flat over this four-year period.
d. Families at the lowest level of income withdrew from First Steps more frequently than all other income levels; and, the proportion of families at this income level grew over the four years.
e. Families at the low to low-middle income levels experienced decreases in the proportion of families withdrawing over this same four-year period.

f. There appears to be a pattern in which as family income grows, the proportion of families withdrawing from First Steps decreases.

Table 30
Proportion of Families Leaving First Steps by Income Level from 2004-07

Year	0-250%	251-350%	351-450%	451-550%	551-650%	651-750%	751-850%	851-1000%	> 1000%
2004	76.9%	8.4%	5.0%	4.4%	2.8%	1.2%	0.8%	0.3%	0.2%
2005	84.3%	7.2%	3.3%	2.7%	1.1%	0.7%	0.4%	0.1%	0.2%
2006	84.7%	5.6%	3.8%	1.6%	1.6%	1.0%	0.5%	0.8%	0.3%
2007	86.4%	4.9%	2.8%	1.6%	1.0%	1.2%	1.0%	0.3%	0.9%

Next, an analysis of the average number of hours children receive in First Steps disaggregated by family income level was conducted. Table 31 presents the results of this data analysis from 2004 through 2007. Results from this table indicate:

a. In 2004, there was little variation among the nine family income levels.
b. In 2005, with a statewide average increase in the number of hours of service per month, there is greater variation among the nine income levels.
c. In 2006, and the advent of greater cost participation requirements, one begins to see a pattern beginning with the lowest income level families, and moving through the next 5 levels—a slight decrease in the average number of hours of services received per month.
d. In 2007, this pattern was even more pronounced, including the seven lowest income levels. The average hours of service increases for the two highest income levels.
e. Since 2005, all income levels have experienced decreases in the average number of hours of service, except the highest income level, which has remained constant over the four-year period.

Table 31
Average Number of Hours of Service Per Month by Income Level from 2004-07

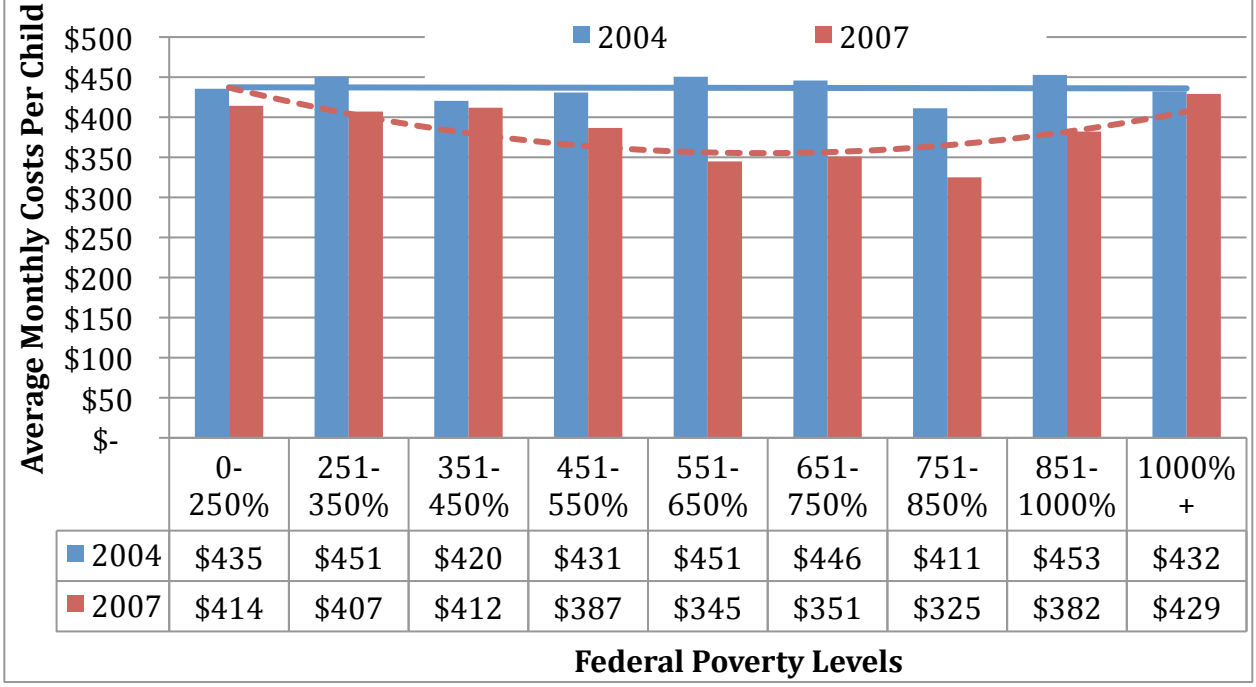
Year	0-250%	251-350%	351-450%	451-550%	551-650%	651-750%	751-850%	851-1000%	> 1000%	State Avg.
2004	5.7	5.8	5.4	5.4	5.7	5.8	5.1	5.7	5.3	**5.7**
2005	6.3	6.8	6.7	6.4	6.9	7.0	6.0	7.4	5.4	**6.4**
2006	5.6	5.8	5.8	5.4	5.2	4.8	6.1	5.9	5.7	**5.6**
2007	5.4	5.2	5.3	4.9	4.4	4.4	4.0	4.7	5.4	**5.3**

7. Does the average cost per child differ by income category of family?

Although closely tied with the average number of hours of service children and families receive each month, further analyses were made to determine if there were differences in the average costs per child across the nine family income levels. Figure 16 presents average monthly expenditures for services across the nine family income levels from 2004 and 2007. Results from this figure indicate:

a. In 2004, there was very little variation in the average monthly service costs across the nine income levels.
b. In 2007, one can see that as family income rose (along with co-pay costs), the average amount spent on services per month decreased. This trend carried through for the seven lowest levels of family income.

Figure 16 Average Monthly Service Costs Across Income Levels



	0-250%	251-350%	351-450%	451-550%	551-650%	651-750%	751-850%	851-1000%	1000%+
2004	$435	$451	$420	$431	$451	$446	$411	$453	$432
2007	$414	$407	$412	$387	$345	$351	$325	$382	$429

8. What percent of the amount billed to the parent is collected by the state?

EDS, the company currently operating the First Steps Central Reimbursement Office, recently completed an analysis of the cost participation data, including the amounts billed to and collected from families, estimated cost recovery expenses, and the amounts of dollars recovered for First Steps. Information provided by EDS concerning cost participation includes:

a. From January 2008 through June 2008, cost recovery expenses (billing and collecting from families, Medicaid, and third party insurance) totaled approximately $43,200. This does not include service coordinator costs in accessing and entering this information from families.

b. During this six-month period, EDS collected $385,284 from families as part of cost participation requirements. In addition, EDS collected $2,841,337.52 from Medicaid; and, $2,329,039.28 from third party liability insurance coverage.
c. On the average, 68% of all families who either were billed or had a past amount due made payments.
d. Families who decline to disclose their personal income information, and who are billed at the highest levels, were less likely to make payments than the other family income groups (41%).

From a national perspective, several states are implementing or considering implementing cost participation and cost recovery in their states to pay the costs of providing early intervention services. Currently, 15 states, including Indiana, have implemented cost participation. The states of Alaska, Massachusetts, Connecticut, Missouri, Georgia, Illinois, Kentucky, New Jersey, New Mexico, North Carolina, Texas, Virginia, Utah, and Wisconsin all require families to financially contribute to the cost of their child's early intervention services.

The 2007 Infant-Toddler Coordinators Association Membership Survey reported several findings that highlight the current and changing status of family cost participation around the country. This survey reported that:

a. 5% of the Part C coordinators indicated their state had implemented cost participation.
b. 11% of states with cost participation have increased fees in the last 3 years.
c. Of the remaining states with cost participation, 13% of participants reported their state was discussing increasing fees.
d. 32% of states with cost participation stated that these fees constituted 6% or less of their annual budget.
e. 21% of the Part C coordinators in states without cost participation indicated their state was discussing implementing these fees.

An informal survey of some states that do have cost participation did not yield enough of a large and representative response to be shared in this report.

4. What impact have changes in First Steps had on the quality of services provided?

The Stakeholder Committee identified eleven specific questions that focused on issues concerning costs, quality, and consistency of evaluations for determining First Steps eligibility across Indiana:

1. Are policy changes being implemented consistently from cluster to cluster?
2. What is the time from referral to service 2005 to 2007?
3. What is the comfort level of providers in their use of the AEPS?
4. In the implementation of the AEPS providers are asked to evaluate and establish goals for disciplines other than their own, how does that conflict with the State practice acts?
5. What is the consistency of the application of AEPS (parent interview versus direct administration)?
6. Should ED teams be scheduled by their own schedulers versus by the SPOEs?
7. What are the average caseload sizes of service coordinators? Is this number reasonable?
8. Are service coordinators efficiently (timeliness, number of cases, are they overburdened) handling caseloads in large county areas from cluster office?
9. Do families have an effective choice of a service coordinator within the SPOE?
10. How do policy changes correspond to the recommendations from the 2005 Stakeholder Committee?
11. How can we improve communication between central office and SPOEs, LPCCs, providers and parents

Many of these questions were developed in response to the recent system changes in how evaluations are conducted.

- Beginning in 2002-pilot Eligibility Determination Teams (EDT) and begin phasing in across the state.
- October 1, 2006-EDTs formally operating throughout the state.
- October 1, 2006-statewide adoption of the *Assessment, Evaluation, and Programming System (AEPS) for Infants and Children* as the required tool used by all EDTs to determine the eligibility of all children for First Steps services. EDTs are also required to complete the AEPS as children exit First Steps.

Additional state policies concerning evaluation are outlined in the EDT Manual and are listed in Table 32.

Table 32
Required Assessment Activities

1. Be scheduled with the family within two business days.
2. Be conducted within 10 business days.
3. Must occur with two team members present and involved, resulting in a comprehensive assessment of the child and family's strengths, level of functioning and recommendations. If eligibility is not in question, then one member will conduct the assessment.
4. Focus on the concerns and priorities of the family.
5. Result in a standard document that will provide a multidisciplinary report related to eligibility and need for service to achieve long-term goals.
6. Be conducted in the family's native language encompassing a family-centered approach.
7. Involve a variety of procedures to include family input.

1. Are policy changes being implemented consistently from cluster to cluster?

The bulk of the data used to answer this question came from the 2007 Quality Review/Focused Monitoring conducted across all nine clusters. It also included a review of the state's policies and professional development requirements as indirect indicators of the state's quality control efforts. The Quality Review/Focused Monitoring results indicate:

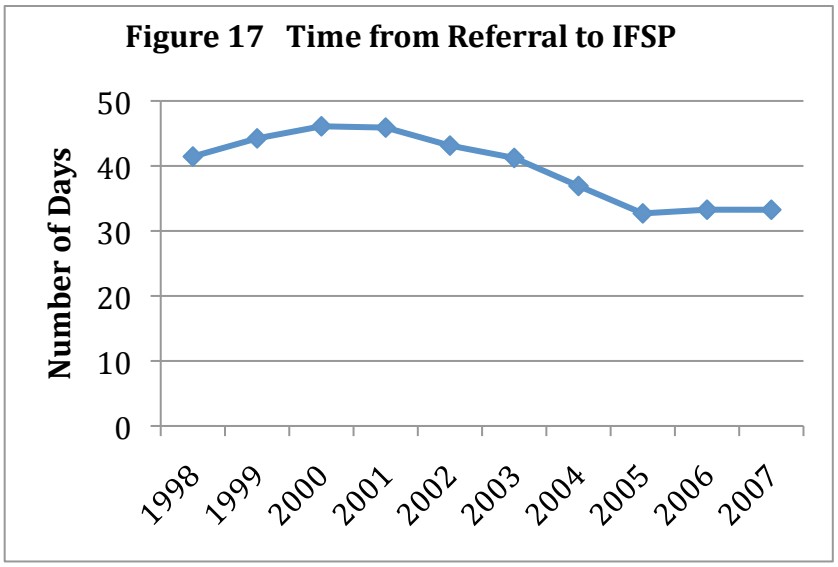
a. All items related to the responsibilities of EDTs were carried out for 99% of all families, based upon the review of eligibility forms completed during initial intake and the evaluation process.
b. A review of the state's policies and ongoing professional development requirements indicate a high degree of quality control for insuring consistent implementation of state assessment policies.
c. All early intervention providers who wish to be a member of an EDT must:
   - have no complaints against them,
   - participate in a two-day training in the use of the AEPS, and
   - participate in ongoing training opportunities.
d. The state provides all EDT members with extensive resources, including:
   - a manual of evaluation and assessment policies and practices,
   - regular updates through the Training Times—the periodic electronic newsletter published through the Unified Training System,
   - access to websites containing information and forms, and
   - individual consultation and training within their team.

2. What is the time from referral to service 2005-2007?

The average number of days from referral to completion of the child and family's initial IFSP was calculated for each year from 1998 to 2007. This measure indicates the speed with which providers move families through the enrollment and eligibility determination process in the system before services can commence. Figure 17 presents the results of this analysis. Findings from this analysis indicate:

a. From 1998 to 2001, the time from referral to IFSP increased from 41 days to 46 days. From 2002 to 2007, the number of days from referral to the first IFSP declined to 33 days.

Figure 17 Time from Referral to IFSP



3. What is the comfort level of providers in their use of the AEPS?

In the survey of First Steps providers, EDT members were asked how comfortable they were in administering the AEPS. Of the 154 EDT members that responded,

a. 49% reported they were *completely comfortable*
b. 42% reported they were *reasonably comfortable*
c. 9% reported being *somewhat* or *not at all comfortable*.

Twenty-seven respondents shared specific reasons for their discomfort with the use of the AEPS. Analyses of their open-ended comments indicated that there were concerns regarding:

a. The psychometric properties of the AEPS in giving accurate scores for determining eligibility, particularly in its assessment of infants and communication development.
b. Assessing skill areas outside their scope of practices.

In addition to the 27 EDT members that shared concerns about the use of the AEPS for determining eligibility for First Steps in certain cases, several providers expressed similar concerns when responding to the final open-ended survey question.

4. In the implementation of the AEPS, providers are asked to evaluate for disciplines other than their own. How does that conflict with the State practice acts?

Open-ended comments from several participants in the First Steps Provider Survey expressed concerns that administering the AEPS and assessing skills outside their area of training and expertise may be a violation of their profession's scope of practice. An example would be a speech-language pathologist assessing gross motor skills. In order to determine if administering the AEPS across developmental domains was outside of the State Practice Acts, information was gathered by examining the State Practice Acts and interviewing representatives from Indiana

professional associations representing Occupational Therapists, Speech-Language Pathologists, and Physical Therapists. Results from these investigations indicate that:

a. The State Practice Acts do specifically outline *what the profession is* and *what their scope of practice entails*. The Practice Acts do not specifically prohibit professionals from administering global assessments such as the AEPS, but they also do not specifically permit professionals to administer global developmental assessments.
b. No formal or document positions concerning the administration of the AEPS have been adopted by the Indiana Speech and Hearing Association, Indiana Occupational Therapy Association, or the Indiana Physical Therapy Association.
c. Representatives from these three associations do refer professionals to their scope of practice for *what they are allowed to do*.
d. Violating the State Practice Acts constitutes a Class B misdemeanor and can result in a person being prohibited from practicing in their profession (i.e. IC 25-27-1-12 of the PT Practice Acts).
e. State policies and procedures state that if delays in a specific developmental area are observed but a therapist from that domain is not included in the EDT, EDT members can request a therapist from the needed domain to administer further assessment.

5. What is the consistency of the application of AEPS (parent interview versus direct administration)?

The Assessment, Evaluation, and Programming System (AEPS) for Infants and Children includes both observation/direct assessment and family interview procedures. ED Team members were asked to indicate what procedures they used in administering the AEPS. Results from the First Steps Provider Survey (N=150) indicate:

a. 99% of the ED Team members carry out both direct assessment and family interview procedures when administering the AEPS.

6. Should ED Teams be scheduled by their own schedulers versus by the SPOEs?

Currently, the scheduling of evaluations varies throughout the state. A member of the EDT schedules the majority of assessments. In the First Steps Provider Survey, EDT members (N=118) evaluated different options that might add to the efficiency of scheduling. Results from this survey question indicated:

a. 59% indicating that a member of the EDT should continue to do the scheduling.
b. 41% indicating that the SPOE or Intake Service Coordinator should be responsible for scheduling the evaluations.

7. What are the average caseload sizes of service coordinators? Is this number reasonable?

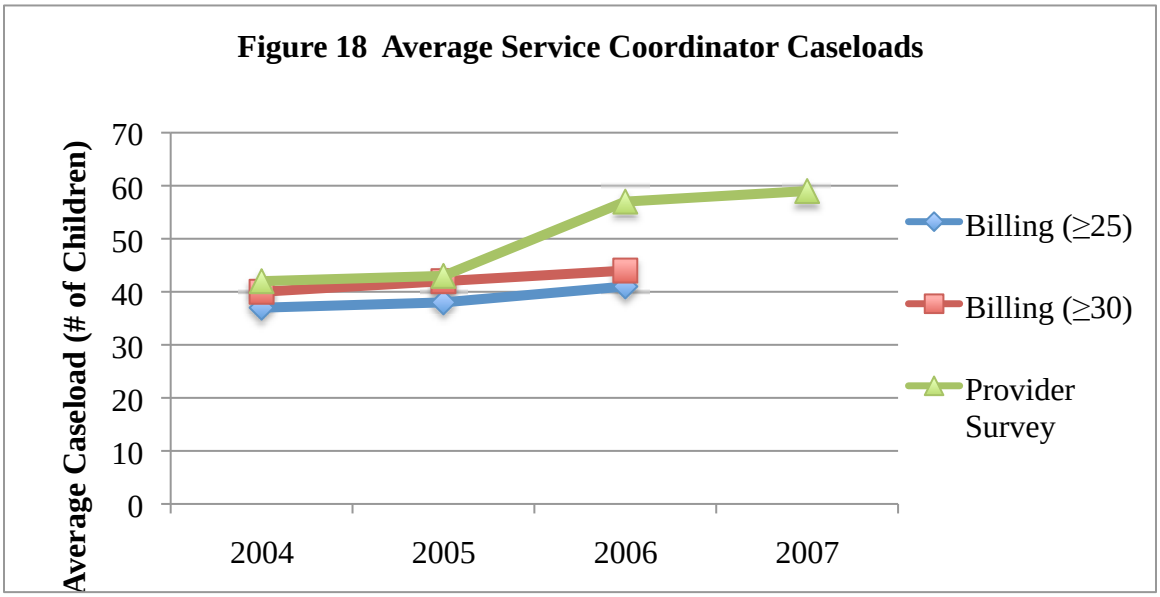
Accurately determining caseload sizes for a full time service coordinator (SC) was difficult. Up until the 2006 movement of SCs to the SPOES, billing data allowed for accurate tracking of the number of families service coordinators served each month. These analyses were confounded because it was unclear which service coordinators were working full time versus part time. At the time of the analyses, the researchers were unaware that SPOEs maintained this information, so the results presented in this section are estimates based upon the billing data and responses

from the First Steps Provider Survey. In analyzing the billing data, arbitrary cut-offs of 25 and 30 families/month were established as two hypothetical thresholds for full time service coordinators. Average caseloads were computed for service coordinators who billed for ≥25 or ≥30 families each month.

Figure 18 presents the results the billing data and the First Steps Provider Survey. The Survey asked service coordinators to share average caseloads for each year from 2004 through 2007. One hundred and fifteen service coordinators responded, most who were currently working in the system. Although few of the SCs reported caseloads as far back as 2004 (N=47), it is likely that these SCs represented the small proportion of SCs that may have worked full-time in the system. Results presented in Figure 18 indicate:

a. In 2004 and 2005, it is estimated that average caseloads for *full time* service coordinators was approximately 40 families.
b. After movement of SCs to the SPOEs, the average reported caseload in 2006 and 2007 was 57 and 59 families, respectively

Figure 18 Average Service Coordinator Caseloads



8. Are service coordinators efficiently (timeliness, number of cases, are they overburdened) handling caseloads in large county areas from cluster office?

As part of the First Steps Provider Survey, service coordinators were asked, *"How well do you feel you are able to carry out your responsibilities as a Service Coordinator in a timely and efficient manner?"* They were asked to rate each of 11 major job responsibilities adopted from the work of the National Research and Training Center on Service Coordination. Table 33 presents the results from this provider survey item. The 11 core service coordination responsibilities are listed in the left column, and are sorted in order of the percentage of service coordinators indicating they were able to carry out the responsibility *Always* or *Most of the Time*. Findings presented in Table 33 are:

a. A large majority of the service coordinators indicated they were able to carry out the majority of the responsibilities either *Always* or *Most of the Time*.

b. Less than 50% of the service coordinators indicated they were not able to *Always* carry out the last five responsibilities.
c. The responsibilities service coordinators are more likely to *always* take care of include important, legally monitored responsibilities.
d. Only 39.7% of the service coordinators indicated they were *Always* able to manage cost participation activities.
e. Responsibilities that are not legally monitored and include providing additional support and information, and working with all members of the team to insure services are coordinated—all of which take considerable time and expertise—are not *Always* carried out by the majority of service coordinators.

Table 33
Percentage of Service Coordinators Carrying Out Major Responsibilities

Service Coordinator Responsibilities	Always	Most of time	Some-times/ Not At All
Informing families about what was happening and if there were any changes to their services	87.6%	11.6%	0.8%
Explaining the rights families have related to First Steps	84.3%	14.0%	1.7%
Insuring families had input about the services their children and families received	80.2%	15.7%	4.1%
Making families feel comfortable talking with me, asking questions, and requesting assistance	73.6%	25.6%	0.8%
Insuring that the IFSP addressed the individual concerns, needs, and priorities of the family	63.6%	32.2%	4.1%
Quickly responding to a family's question and request for help	55.0%	40.8%	4.2%
Assisting families to advocate for their child	44.6%	46.3%	9.1%
Insuring that support and services were coordinated and professionals agreed and worked together	40.5%	52.9%	6.6%
Informing families about community services and resources that were available to meet their children's needs	38.8%	48.8%	12.4%
Managing cost participation activities, including medical insurance	39.7%	45.5%	14.9%
Assisting families in coordinating community opportunities for their children	30.8%	50.0%	19.2%

Families were also asked to respond to similar questions in the First Steps Family Survey. Families were asked evaluate the quality of First Steps services, of which a number of the items were measures of the quality of service coordination that they received. Table 34 presents the result of this part of the survey in which 619 families responded. Results indicate:

a. Families indicated that service coordinators almost *Always* accomplished their major responsibilities, and that their experiences with First Steps was of high quality.
b. The ordering of items, from highest to lowest rated, parallels the ordering of service coordinator responsibilities presented above in Table 33.
c. Items near the bottom part of the table are similar to the items service coordinators noted were done less than *Always*, suggesting a level of agreement between families and service coordinators.

Table 34
Family Evaluation of First Steps Services

Survey Item-*How well does this statement fit you?*	**Always**	**Most of time**	**Sometimes /Not At All**
Our IFSP addressed the individual concerns, needs & priorities of our family	82.3%	14.3%	3.4%
We had input about the services our child and family received	82.1%	13.8%	4.0%
My family knew what was happening and if there were any changes to our services	82.0%	14.6%	3.4%
We were comfortable talking with the Service Coordinator, asking questions, and requesting assistance	82.0%	12.1%	5.9%
We knew our rights related to First Steps	79.1%	16.1%	4.8%
We felt we were able to successfully advocate for our child	77.6%	18.2%	4.2%
We received support and services that were coordinated, where all of the professionals agreed and worked together	75.2%	17.3%	7.5%
Our Service Coordinator quickly responded to our questions and requests for help	74.6%	17.3%	8.1%
Our Service Coordinator told us about services and resources that were available	74.6%	16.3%	9.1%
Our Service Coordinator assisted us in coordinating community opportunities	53.2%	18.6%	28.3%

9. Do families have an effective choice of a service coordinator within the SPOE?

Current state policy and procedures denote that families do not have an initial choice of service coordinators. For new families entering First Steps services, ongoing service coordinators are assigned to families. Families can request changes after the initial assignment.

As part of the First Steps Family Survey, families were asked to indicate the extent to which they had a choice of service coordinators, with answers ranging from *Always* to *Not At All*. Table 35 presents the results from the 609 families who responded, by years. Results from this table indicated:

a. In 2007, 33% of the 119 families reported they *Always* had a choice of service coordinators; and 58% reported they never had a choice.
b. For families who exited between 2003-06, 47% of the families reported they *Always* had a choice of service coordinators; and 38% reported they never had a choice.
c. For families who exited between 1997-2002, 37% of the families reported they *Always* had a choice of service coordinators; and 49% reported they never had a choice.
d. On the average, less than half of the families over the past 10 years reported *Always* having a choice of service coordinators.

Table 35
Family Choice of Service Coordinators

Year Family Exited	Always	Most of the time	Some-times	Not at all	# of Families
1997-2002	37%	8%	6%	49%	154
2003-2006	47%	10%	6%	38%	336
2007	33%	7%	3%	58%	119
Total	42%	9%	5%	44%	609

To gain a national perspective on choice of service coordinators, several states were contacted and asked to share their policies. Results from this informal survey found a number of states that do not provide families the choice of service coordinators:

- Mississippi - Families are assigned service coordinators depending on their geographic location. Generally, service coordinators are assigned to 2-3 counties. If a family is dissatisfied with their service coordinator and asks for a change, the service coordinator is changed, regardless of their "catchment area."
- New Mexico - Allows the choice of service coordinator but cannot always be accommodated—for example, if a service coordinator goes to one rural community – it may be too expensive to have another service coordinator to also travel.
- New York - The local early intervention program assigns an 'initial' service coordinator to assist the family through the evaluation and initial IFSP meeting. At the initial IFSP meeting, the parent chooses an 'ongoing' service coordinator.
- Illinois - Service coordinators are assigned based upon availability. In some of the rural areas service coordinators are assigned a specific county so the family may not have any additional choices. If a family is given a service coordinator that they do not want, they can request another service coordinator. Service coordinators with specific expertise may be assigned to children with particular needs.
- Connecticut – The service coordinator is also one of the family's providers. If they do not like their service coordinator, they can request someone else from the early intervention program in which they are enrolled. They can also request to transfer to a different EI program. Each town has at least two programs available and some have as many as nine programs.
- Virginia - Does not allow families a choice of service coordinator but will begin doing so July 1, 2009.

10. How do policy changes correspond to the recommendations from the 2005 Stakeholder Committee?

In 2005, a First Steps Stakeholder Committee was formed to consult with state administrators as major policy changes were being considered. Membership included parents, independent and agency providers, advocacy organizations, and persons unaffiliated with other committee members. The committee also focused on providing a balanced representation of the different geographical areas of the state. Through meetings and the efforts of several work groups, recommendations to and negotiations with state administration occurred. An analysis of meeting minutes, documents, and correspondence was conducted, and included:

- Meeting minutes from the topical sub committees dated 4/05 through 9/05
- Correspondence between the state and members of the First Steps Stakeholders Committee from January through September 2005.
- 1/26/05- Letter to FS Stakeholders from FSSA
- 2/23/05- Letter to FS Stakeholders from FSSA
- 3/21/05-9/19/05- Minutes Stakeholder Committee
- 9/30/05- Letter containing decision concerning service coordinators from FSSA

Table 36 presents the analyses of the recommendations and eventual policy changes. The first column identifies the *specific topic under review*. The second column identifies the *specific issue identified by the First Steps Stakeholder Committee*. The third and fourth columns present the *recommendations by the Stakeholder Committee* and the *eventual outcome*, indicating how well eventual state policies reflected the Committee's recommendations.

Review of the issues, recommendations, and actual policy changes suggests that many of the policy changes did correspond with recommendations from the Stakeholder Committee. These recommendations included:

1. Relocating the First Steps Program under the Division of Disability and Rehabilitative Services.
2. Continue to authorize and pay for First Steps services as had traditionally occurred (as a Medicaid *carve out*) rather than entering into Managed Care Organization agreements.
3. Changes in cost participation, including increased co-pays and accessing the family's health insurance.
4. Changes in eligibility requirements to remove the biologically at risk category and make modest changes to the developmental delay criteria.

Policy changes that did not correspond with the Stakeholder's recommendations or in which no clear recommendations or comparisons could be made, included:

1. Concerns regarding cost participation, access of family's health insurance, and the possibility that families with insurance caps could exhaust their insurance benefits because of First Steps (although personal communication with the state suggested that there are procedures in place for insuring this does not happen).
2. Discussion concerning the need for a provider network was suspended.
3. Recommendation that service coordination remain independent and a Compliance Officer in each SPOE monitor services.
4. Questions concerning the value and role of a central reimbursement office.

Table 36

First Steps Stakeholder Recommendations and Policy Changes

Topic	Issue	Committee Recommendation	Policy Changes
Home for First Steps	As the result of the restructuring of FSSA, First Steps will no longer be part of the Bureau of Child Development. It will be necessary to discuss options for where First Steps will be administrated.	The consensus recommendation was to house the administration of First Steps in the Division of Disability and Rehabilitative Services (DDRS) in Family and Social Services Administration (FSSA).	The First Steps program moved to the Division of Disability and Rehabilitative Services (DDRS). The priority was to preserve all funding. Policy change did correspond to Stakeholder Committee recommendation.
Medicaid/MCO	For First Steps families enrolled in Medicaid, FSSA proposed requiring all First Steps services be provided through Managed Care Organizations (MCO), similar to what it was implementing in other divisions.	Recommendation was that First Steps services should continue to be billed through traditional Medicaid mechanisms as it had in the past and similar to how the Department of Education was billing Medicaid.	After the details of the conversion to MCOs were worked out, state personnel concluded that it would not be advantageous to include First Steps services under the MCO model. There were no policy changes, which corresponded with the recommendations of the Stakeholder Committee.
Insurance/Cost Participation	The state wished to proceed with efforts to increase access insurance benefits from other companies to support individual services. The state also wished to increase the cost	The committee reviewed cost participation language to be submitted for legislative consideration. Their concern remained that a family could waive cost participation if financial or personal	State legislated increases in cost participation for families above 250% Federal Poverty Level (no costs to children below this level); and required families to provide information and consent to insurance

Topic	Issue	Committee Recommendation	Policy Changes
	participation of families.	hardship is demonstrated. The committee also expressed concerns that families with insurance caps could exhaust their insurance benefits because of First Steps.	benefits or agree to pay a designated cost per service with the exception of evaluation and assessment and service coordination. Insurance payments would be credited toward family co-payments. The division determined that it may also waive third party payer recovery if the family demonstrates a financial or personal hardship. Policy changes did take into account Stakeholder Committee concerns regarding insurance caps.
Provider Network	FSSA desired a provider network that would manage care-coordination; credential, train, and supervise providers; and, assist in billing.	A committee was formed but the topic was withdrawn by First Steps in lieu of more pressing concerns.	The option of a provider network was suspended. Focus of this committee was changed to Service Coordination and Eligibility Determination (ED) Teams and how they fit into the system. While there were no recommendations, the process was suspended.

Topic	Issue	Committee Recommendation	Policy Changes
Eligibility	The state expressed concern about Indiana's eligibility criteria and the associated costs of serving so many children. It was noted, that Indiana had one of the least restrictive definitions for developmental delay, nationally. The state also recommended a "tracking system to be in place to follow children who would have been eligible under (then) current eligibility guidelines but are no longer eligible."	The committee recommended to include those with a delay of 15% in two developmental domains, or 25% in one, and to move the most critical conditions found under the "Biological at-risk" category under the High Probability of delay or disability" category.	Children must have 25% delay in one area of development or 20% in two areas. The state removed "biological at-risk" as a separate eligibility category and moved many but not all children with biological risk factors to the Medical Conditions category. SPOEs were directed to maintain tracking lists of children not eligible and call back in three months for an update of developmental progress. Policy changes <u>did, in part</u>, correspond to Stakeholder Committee recommendations.
SCED (Service Coordination Eligibility Determination)	Assessments indicated that service coordinators were not consistent in their provision of services to eligible families. The state expressed the need to bring greater consistency and a level of supervision to service coordinators. Some First Steps clusters had effectively implemented the use of Eligibility Determination Teams in order to be more	The Committee presented three options with their recommendation being that service coordination remain independent and a Compliance Officer put in each SPOE to monitor SC activities related to intake and ongoing service delivery.	State administration reviewed all of the options and their final decision was to make all service coordinators (intake and ongoing) employees of SPOE with supervision there. It is the "*only way we can properly support and supervise this vital system function."* Policy changes <u>did not</u> correspond to Stakeholder Committee recommendations.

Topic	Issue	Committee Recommendation	Policy Changes
	consistent and reliable in determining the eligibility of children for First Steps. This streamlined the process and became a more effective way for children to access needed services in a timely manner.		
CRO (Central Reimbursement Office)	FSSA administration questioned the need to maintain multiple claims payment systems to serve various FSSA programs.	The committee supported the continuing function of a separate CRO for First Steps.	The CRO contract was moved from one company to another (from COVANYS to EDS). EDS was already used for Medicaid reimbursement, which handles eligible children. It used a web-based system, and the goal was for it to be as 'user friendly' as possible. 8/29/08 announcement that CSC Covansys will once again be CRO for FS. The transition from the current vendor will include the claims management, provider management and case management system.

11. How can we improve communication between central office and SPOEs, LPCCs, providers and parents?

As part of the First Steps Provider Survey, providers were asked to offer suggestions concerning how to improve communication between providers and families. Two hundred and sixty eight (N=268) providers offered open-ended suggestions. Qualitative analysis of these suggestions was conducted and five themes were generated. Provider suggestions included:

a. Need to function in a family-centered/family-friendly way.
b. Pay/Allow ongoing providers to attend IFSP and other meetings at same rate as treatment.
c. Discuss expectations with families-have clearly defined roles/responsibilities.
d. Improve/Change how SC interacts with families.
e. Increase Accessibility-share e-mail, business cards, nametags, etc.

The providers were also asked to offer suggestions concerning how to improve communication between providers and the SPOE. Three hundred and thirty two (N=332) providers offered open-ended suggestions, which were analyzed using qualitative procedures. Results from that analysis included the following suggestions:

a. Communicate electronically (N=87).
b. Change in Provider/SPOE/Leadership behaviors (N=86).
c. Procedural Issues/Changes (N=51).
d. Have more meetings (N=51).
e. Provide networking opportunities (N=35).

5. What impact have changes in First Steps had on the recruitment and retention of service providers?

The Stakeholder Committee identified 11 specific questions that focused on First Steps personnel, including the number of First Steps providers, possible shortages, the recruitment and retention of qualified providers, and the quality of training available to providers.

1. What is the number of providers by discipline by county providing services during 2005, 2006, and 2007?
2. What are the number of providers by county by specialization or category 2005, 2006 and 2007?
3. What is the number of providers by discipline by county entering the system during 2005, 2006, and 2007?
4. What is the number of providers who have entered and left by discipline and by county from 2005 to 2007?
5. In those areas with a suspected provider "shortage", is it due to lack of providers, over-utilization or both?
6. What is the most effective way to ensure adequate numbers of providers in each area?
7. How are we ensuring quality providers in the system?
8. Would a random sample of providers rate the professional development training provided as effective and of value?
9. What would providers see as an incentive to serve underserved populations?
10. Should there be payment premiums for providers who agree to practice in high needs areas?
11. Has the movement of the CRO (central reimbursement office) from Covansys to EDS resulted in provider billing frustration and departure from the system?

Data to answer the questions in this section came from several sources: provider service and billing data from the state's Data Warehouse, provider responses to our First Steps Provider Survey, and the research literature. It was not possible to report data at the county level because providers are not limited to providing services in a single county. In addition, no data was available that identifies providers as full or part-time. Consequently, it was not possible to correctly assess the number of providers by *full-time equivalency*. Neither the Service Matrix, a web-based tool for identifying available providers, nor the UTS database, provide a complete and accurate representation of the true numbers and availability of providers by county. Neither the Service Matrix nor the UTS database accurately maintains historical data—i.e., whoever was on the matrix in 2005 is not reliably known once the provider leaves.

1. What is the number of providers by discipline by county providing services during 2005, 2006, and 2007?

An analysis of the number of providers across counties was not possible with the available data. Providers may serve children across multiple counties, and no database exists that outlines available provider caseload by county. Further analyses of the number of providers by discipline are presented under the following question.

2. What are the number of providers by county by specialization or category 2005, 2006, and 2007?

An analysis of monthly billing data was conducted to determine the number and type of providers offering services from 2004 through 2007. If a provider was paid for services for any given month in a year (e.g., February of 2004), they were included in the count for that particular year (e.g., 2004). Table 37 presents the results of this analysis—the number of providers by discipline that billed in each year from 2004 through 2007. The last column shows the percentage change in the number of providers between 2004 and 2007. Please note that further reviews and analyses of this data showed some variation in the actual number of providers reported in this table. The reader should look at the individual numbers in each table cell *cautiously*; and focus more on the upward/downward trend presented. Results indicate:

a. From 2004 through 2007, the four largest disciplines billing for First Steps services were Developmental, Occupational, Physical, and Speech Therapists.
b. From 2004 through 2007, the overall number of providers billing declined, moving from 2,072 providers in 2004, to 1,1762 providers in 2007—representing a 15% decrease.
c. Over this four-year period, the number of providers in all disciplines decreased, except Nursing (10%) and Developmental Therapists (20%), which both saw increases.

Table 37
Number of Providers by Discipline by Year*

Discipline	2004	2005	2006	2007	% Change
Audiology	75	75	59	55	**-27%**
Developmental Therapy	432	504	521	520	**20%**
Interpreter Services	40	41	18	13	**-68%**
Nutrition	36	35	37	29	**-19%**
Other Related Services	37	28	13	5	**-86%**
Occupational Therapy	388	364	322	312	**-20%**
Psychology	22	21	19	19	**-14%**
Physical Therapy	394	371	344	316	**-20%**
Nursing	10	12	16	11	**10%**
Speech Therapy	571	537	481	440	**-23%**
Social Work	27	32	33	12	**-56%**
Vision	16	14	10	5	**-69%**
Unknown	24	25	25	25	**4%**
Total	**2072**	**2059**	**1898**	**1762**	**-15%**

* Please use caution in reviewing the specific number of providers for a specific discipline and year. Variations in the numbers from different analyses of this data have been found.

3. What is the number of providers by discipline by county entering the system during 2005, 2006, and 2007?

As discussed earlier, existing data did not allow for examining the number of providers entering the system by county. Data concerning the total number of providers by discipline entering the system across the state is presented under the next question.

4. What is the number of providers who have entered and left by discipline and by county from 2005 to 2007?

Further analyses of the billing data were conducted to determine the month and year in which each provider first billed First Steps. Table 38 presents the results of these analyses—the number of new providers by discipline entering the system each year from 2004 through 2007. Results from Table 38 indicate:

a. From 2004 to 2007, the number of new providers entering First Steps has decreased each year, from 384 in 2004 to 223 in 2007, a 42% decrease over the four-year period.
b. In 2004, 114 Developmental Therapy providers entered the system, followed by another 131 new providers in 2005, 104 new providers in 2006, and 90 new Developmental Therapists in 2007.
c. From 2004 to 2007, decreases in the number of new providers entering the First Steps system were noted for all disciplines.

Table 38
Number and Type of Providers
Entering First Steps over Time

Discipline	2004	2005	2006	2007
Audiology	10	16	6	8
Developmental Therapy	114	131	104	90
Interpreter Services	18	16	4	3
Nutrition	5	5	12	3
Other Related Services	22	8	2	0
Occupational Therapy	68	30	36	37
Psychology	3	3	3	0
Physical Therapy	46	31	38	31
Nursing	4	5	6	0
Speech Therapy	83	54	50	48
Social Work	5	15	7	3
Vision	6	2	0	0
Total	**384**	**316**	**268**	**223**

The same data and tools were used to identify the *last time* each provider billed First Steps. If a provider ceased billing and did not bill in the following months, an assumption was made that the provider had exited the system.

Table 39 provides information on the number and type of providers exiting from the First Steps system. Results from this table indicate:

a. 2005 and 2006 saw the largest number of providers cease billing First Steps, a total of 805 billers.
b. Since 2005, the number of providers who cease billing and exit First Steps has declined to a low of 301 providers in 2007.

Comparing this data with Tables 37 and 38, Indiana lost more providers than it recruited from 2005 through 2007.

Table 39
Number and Type of Providers
Exiting First Steps over Time

Discipline	2004	2005	2006	2007
Audiology	16	22	12	18
Developmental Therapy	57	86	96	85
Interpreter Services	15	27	8	9
Nutrition	6	10	11	5
Other Related Services	17	17	8	3
Occupational Therapy	53	76	53	54
Psychology	4	4	1	4
Physical Therapy	54	63	66	52
Nursing	3	2	5	5
Speech Therapy	85	108	91	65
Social Work	10	6	24	1
Vision	4	4	5	0
Total	**324**	**425**	**380**	**301**

Occupational (53%), and Physical (56%) Therapists and Psychologists (63%) remained and billed for services over this four-year period.

An additional analysis was made to examine the average caseload sizes between providers who remained or exited from First Steps over this four-year period. The results of this analysis indicated a significant difference between the two sets of providers:

a. Remaining providers served, on average, 16 children each month (M=15.5).
b. Exiting providers served an average six children per month (M=6.4).
c. While the average caseloads for both groups were well under a full caseload, providers who remained served more than twice the number of children, on

Finally, an analysis of the number of providers by discipline that billed throughout the four-year period was conducted to look at the overall *retention* of providers in the First Steps system. Table 40 shows the number of providers by discipline who billed at the beginning of 2004 (either January or February); and the number of those providers who also billed the end of 2007 (November or December). The last column looks at the percentage of providers retained over this four-year period. Results from this table indicate that:

a. On the average, 51% of the providers remained in the system over this four-year period.
b. The majority of Developmental (57%),

Table 40
Number and Percentage of Providers
Remaining Over the Four Years

Discipline	2004	2007	%
Audiology	65	**20**	31%
Developmental Therapy	318	182	57%
Interpreter Services	22	0	0%
Nutrition	31	12	39%
Other Related Services	15	0	0%
Occupational Therapy	320	171	53%
Psychology	19	12	63%
Physical Therapy	347	194	56%
Nursing	6	0	0%
Speech Therapy	488	243	50%
Social Work	22	8	36%
Vision	10	2	20%
Total	**1663**	**844**	**51%**

average, than providers who exited.

5. In those areas with a suspected provider "shortage," is it due to lack of providers, over-utilization or both?

As part of the First Steps Provider Survey, current and past providers were asked to share what they saw as the primary and contributing factors for why some children did not receive the level of services recommended or authorized by the IFSP Team. Results from this survey indicated that:

a. 78% of all providers (N=964) surveyed identified *Availability of Providers* as the largest primary or contributing factor.
b. 94% of current service coordinators and members of the EDTs (N=229) identified *Availability of Providers* as the largest primary or contributing factor.

Current service coordinators and EDT members were further surveyed to assess why availability of providers was a problem. Survey respondents were asked to choose among four possible factors affecting availability. Table 41 presents the results of this survey question. Results indicate that:

a. 98% of current service coordinators and EDT members stated that there was a *Shortage of Providers* that was contributing to problems with certain providers not being available for services.
b. 30% also indicated that some providers refuse to provider services, or offer limited availability to First Steps children, coinciding with the earlier finding that the average caseload for providers is approximately half time.
c. Only 4% noted that provider availability problems were due to providers delivering high amounts of services to fewer children (over utilization).

Table 41
Factors Affecting the Availability of Services
(N=229 Service Coordinators & EDT Members)

Factor	% of Providers
Shortage of providers	98%
Providers refuse or offer limited availability	30%
Providers do not offer consultative services	10%
Providers offer high amounts of direct services (over utilization)	4%

Additional survey questions that focused on the problems associated with provider availability found that:

a. Speech/Language Pathologists and Occupational Therapists, and to a lesser extent, Physical Therapists, were identified as the disciplines where shortages were greatest.
b. These shortages were affecting what services were recommended and provided to children.

Looking nationally, other researchers report similar personnel shortages in other states. The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool

Special Education (Bruder, April 2006) surveyed all 50 states to identify which states experienced personnel shortages. Their findings indicate that:

a. 41states reported shortages in Speech/Language Pathologists,
b. 27 states reported shortages in Occupational Therapists,
c. 24 states reported shortages in Physical Therapists, and
d. 29 states reported shortages in Special Educators (Developmental Therapists)—a shortage not found in Indiana.

In another study, the American Speech and Language-Hearing Association (ASHA) conducted a survey of public schools in which was reported a 62% shortage of qualified speech/language pathologists (SLP) in both rural and urban settings. In addition to the shortage of SLPs in the Center project, a substantial number of state coordinators report being unsure about the adequacy of personnel supply (up to 31.1%) or adequacy of training (up to 35.6%).

6. What is the most effective way to insure adequate numbers of providers in each area?

The Individuals with Disabilities Education Improvement Act of 2004 (IDEIA 2004) requires a comprehensive system of personnel development that mirrors the language of IDEA 1997. The basic components include implementing "innovative strategies and activities for the recruitment and retention" of qualified early education service providers. Sec 635(a)(8). There is adequate research available to support the importance of highly qualified service providers to the early intervention system. Recruiting and retaining such individuals demands both pre-service and in-service preparation to be coordinated and systemic. While the literature emphasizes the structure of meaningful, focused professional development and support during formative first years for providers (McCormick & Brennan, 2001) it also emphasizes the need to attract providers from minority groups in order to be able to better respond to the increasing diverse population.

Most states are struggling with recruiting and retaining adequate numbers of highly qualified providers to serve their early intervention population. States have long been required to establish and carry out a *comprehensive system of personnel development* (CSPD) for insuring adequate numbers of highly qualified providers. The components of a sound CSPD generally include:

- *Personnel Standards* to assure that all First Steps providers are adequately prepared and trained.
- *Recruitment and Retention Plan* to assure that adequate numbers of qualified First Steps providers are available throughout the state.
- *Ongoing Professional Development Plan* to assure that existing providers receive adequate and ongoing training in current issues and research-based practices.
- *Performance Evaluation System* to assess and monitor the quality of services and practices provided to children and families.
- *Data System on Personnel and Personnel Development* to assure accurate and reliable data on personnel numbers, resources, and needs.
- *Collaborative State-Level Partnerships* to assure coordinated and systematic pre-service and in-service professional development among training agencies, institutions of higher education, and the community programs and providers they serve.

Each of these six components comprise a number of activities and elements that any state, including Indiana, should have to address the current and projected needs for highly qualified

staff. Table 42 on the following pages outlines some of the key elements that Indiana and other states should minimally have in place.

Table 42

Indicators of a Comprehensive System of Personnel Development for Insuring Adequate Numbers of Highly Qualified First Steps Providers

CSPD	Key Element	Present in Indiana?		
		Yes	Some	No
Personnel Standards	Personnel standards to ensure that professional personnel are appropriately and adequately prepared and trained are established.	X		
	Academic degree standards for all First Steps professionals exist and reflect the highest requirements in the State.		X	
	Short-term and long-term strategies exist and include activities, objectives and time lines to assist personnel to meet the required standards.	X		
	Funding support exists for the implementation of a retraining plan to assist personnel to meet the highest requirements in the State.			X
	An evaluation strategy exists for the planned recruitment and retraining efforts to ensure that all personnel meet the highest requirements.			X
	System exists for evaluating the performance of all providers to make decisions concerning professional development, retention, and promotion.		X	
Recruitment & Retention Plan	Plan to address the current and projected needs for qualified personnel, including strategies to recruit and retain qualified staff, exists.		X	
	Factors that adversely affect the ability to hire qualified staff, such as pay scales or qualified personnel shortages, identified and addressed.			X
Ongoing Professional Development	Systematic plan for providing adequate and ongoing training to all staff.	X		
	Plan addresses the retention of qualified personnel and capacity building.		X	
	Staff development plan is based on a needs assessment.	X		
	Staff development plan includes training in best practices, including: • Typical and atypical child development • Research-based practices to produce desired child/family outcomes • Family-centered practices	X		

CSPD	Key Element	Present in Indiana?		
		Yes	Some	No
	• Integrated therapy/inclusive service delivery models • Collaborative service models, including effective teaming			
Data System	System to collect and analyze on an annual basis data on qualified personnel needs and personnel development is developed and maintained.		X	
	System includes information on type of position, ratio of personnel to families served, staffing requirements to meet the needs of the families, and projected requirements to meet staffing needs for the next five years.			X
	System includes information on institutions of higher education and the number of students graduating from those institutions by type of program.			X
Collaborative State Partnerships	First Steps CSPD activities are coordinated with other state CSPD efforts.			X
	Pre-service and in-service training activities are coordinated among agencies and institutions of higher education.		X	
	The State Interagency Coordinating Council reviews and comments upon the CSPD policies and procedures.		X	

7. How are we ensuring quality providers in the system?

A review of Indiana's comprehensive system of personnel development practices were conducted to identify which elements were currently in place, partially in place, or not in place at all. Table 42 presents the results of this review of Indiana's practices. The findings from this review and presented in Table 42 indicate:

a. Academic degree and personnel standards are in place, and the Unified Training System provides training to assist personnel in meeting those required standards for all disciplines. However, other than a required four-year degree and a preference for a degree in education, there are no specific standards/licensing of developmental therapists.
b. Funding is provided to subsidize personnel training to support continuing provider re-credentialing and to make available orientation training for new providers; however, there is no funding for recruiting and retraining providers working in other fields (e.g., rehabilitation) to work in early intervention or to meet the state's highest degree requirements.
c. With the movement of service coordinators to the SPOEs and the hiring of supervisors, a system exists for evaluating the performance of these providers; however, no such system exists for all other First Steps providers.
d. In their annual RFF, SPOEs were required to include individual plans for recruiting and retaining qualified staff in their respective clusters; however, there is no

consistent, statewide plan for recruitment and retention, nor are factors that may adversely affect the ability to hire and retain qualified staff identified and addressed.

e. The Unified Training System addresses the ongoing training needs of current staff, using needs assessment data and current best practices in the field to guide efforts; however, their work does not specifically include personnel retention efforts and the recommendations from the State ICC workgroup have not been acted upon.
f. The Unified Training System maintains a database of current First Steps personnel and their records for meeting all entry and ongoing professional development requirements (in-service training); however, there is no state data system that guides the state to systemically address its overall personnel needs and link personnel development resources.
g. First Steps has worked with other state agencies to focus training resources on the transition of children to preschool programs; however, no evidence of any other coordinated efforts could be found.
h. A Governor's ICC workgroup existed and made recommendations concerning recruitment and retention, many of which were acted upon.

In regard to one of the CSPD elements identified above, identifying and addressing factors that adversely affect the ability to hire qualified staff, questions were included in the First Steps Provider Survey that provide insight to some of the possible factors. From the 2,856 surveys that were emailed out, 1,164 providers responded. First Steps providers who responded were asked if they had left First Steps or were thinking of leaving First Steps. One hundred and twenty providers indicated they had left the First Steps system, and 398 providers were thinking of leaving. These providers were then asked why they had left or were thinking of leaving First Steps. Figure 19 presents the survey results for this last question. Survey results presented in this figure indicate:

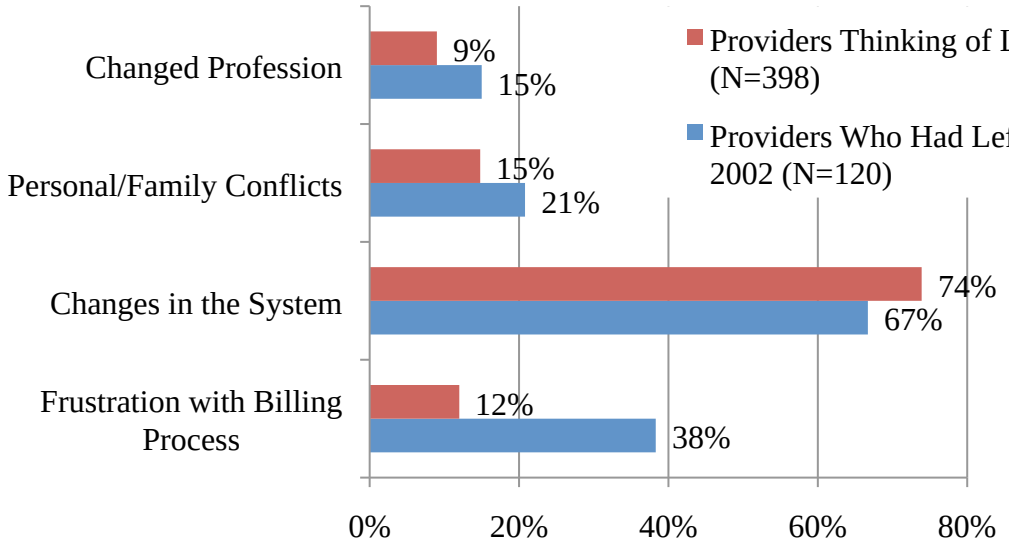
a. Approximately 70% of the providers reported that the primary reason they left or were thinking of leaving was due to the changes in the First Steps system.
b. 30% of current providers were thinking of leaving because of their frustrations with the present billing system process.

These providers were also provided open-ended comments concerning other reasons for leaving and what would entice them to stay in the First Steps system. Qualitative analyses of these comments indicate that:

a. 34% of the providers indicated that increased compensation, benefits, and/or reimbursement for costs in providing services (e.g., travel) were a major factor
b. 10-12% of the providers indicated paperwork demands and improvements in system practices (e.g., evaluation/eligibility determination, billing) were additional factors.

These findings correspond with what is happening nationally. In a survey of Part C Coordinators across the country, 90% of the people who are responsible for managing their state's early intervention system indicated that their state had experienced a shortage of providers over the past three years. Forty-seven percent of the Part C Coordinators reported they had lost between 10-20% of their practitioners over the past three years. The reasons given for providers leaving are similar to Indiana's providers: paperwork, rates of reimbursement, federal requirements, concerns with the state's delivery system and state policies, and timely reimbursement.

Figure 19 Reasons Providers Leave First Steps



8. Would a random sample of providers rate the training provided as effective and of value?

As part of the First Steps Provider Survey, providers were asked, "What is the effectiveness of the UTS trainings currently available to you as a FS provider?" They were asked to indicate if ALL, MOST, SOME or NO training offered new ideas and strategies they could use with the children and families they serve. Table 43 presents the results from this survey questions. The results indicate:

a. 44% of providers indicated that *Most* or *All* of the training offered new ideas or strategies they could use.
b. 50% of the providers felt that *Some* of the training offered useful ideas and strategies.
c. 6% of the providers felt that the training offered *NO* new ideas or strategies.

Table 43
Percentage of Providers Indicating
Effectiveness of Training (N=988)

Response Choices	%
ALL training offers new ideas and strategies I can use with children and families	7%
MOST Training offers new ideas and strategies I can use with children and families	37%
SOME Training offers new ideas and strategies I can use with children and families	50%
NO new ideas or strategies presented at training sessions	6%

9. What would providers see as incentives to serve underserved populations?

The data analyses for this question have been folded in with the next question due to their similarity.

10. Should there be payment premiums for providers who agree to practice in high needs areas?

The results from the First Steps Provider Survey, concerning reasons for leaving and enticements for staying, presented above, identified possible systems factors for retaining providers working in all areas of the state. These factors included increased compensation and reimbursement for travel costs.

The available research as well as the First Steps Provider Survey results acknowledge that providing early intervention services in both rural and high risk settings has always provided 'particular challenges' to service providers. For providers working in rural areas, salary, social and geographic isolation, lack of support or assistance for new providers and fewer opportunities to participate in professional development activities are all challenges supported by research (Williams, Martin & Hess, 2002; McClure, Redfield and Hammer, 2003). In rural areas especially there is the added expense of travel in order to provide services to children and families. (McClure et al., 2003). High-risk urban areas have their own set of factors. Providers who work with underserved populations and in areas they are unfamiliar with are often faced with "dramatically different attitudes and beliefs about child rearing, disability, and the role of the educational programs" (Cho, Singer, and Brenner, 2000 p. 236).

What are the possible strategies for recruiting and maintaining adequate numbers of highly qualified providers to work in these challenging areas? Research cited above and the results from the First Steps Provider Survey suggest the following:

a. Specific professional development training to support working in rural or urban settings (e.g., culture, safety issues), including release time to observe experienced providers, and opportunities to meet with other providers working in similar settings.
b. Since rural or inner city environments may be less desirable because of safety risks, high poverty associated, and economic stress (Monk, 2007; Brownell et al., 2005; SCTQ, 2002), increases in salaries, perquisites, bonuses, reimbursement for higher costs (e.g., travel time and travel costs), and flexible funding to address the higher frequency of cancelled visits or "no shows."

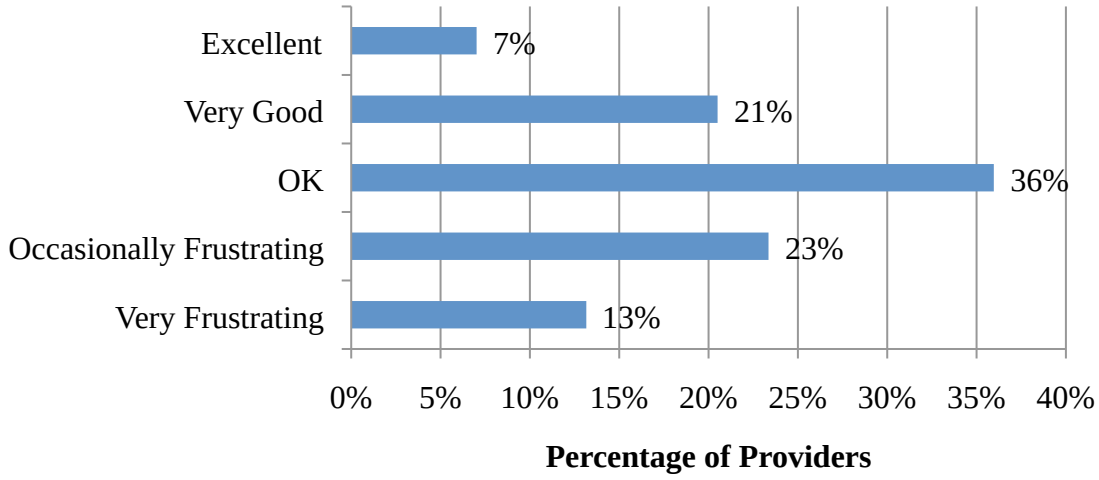
c. Targeted recruitment efforts that employ creative strategies at the state level to bring in providers to work in rural and high-risk areas (Rossenkoetter, Irwin, & Saceda, 2004). For example, a common marketing plan, an online recruitment board linked to professional organizations, having therapists talk to university classes in an attempt to attract additional providers to an area, or student loan forgiveness.

11. Has the movement of the CRO (central reimbursement office) from Covansys to EDS resulted in provider billing frustration and departure from the system?

As part of the First Steps provider survey, providers were asked to rate their experience with the movement of the CRO from Covansys to EDS. Figure 20 presents the results of that survey question. The findings indicate that:

a. 39% of the providers rated their experience as Very Good to Excellent.
b. 36% rated their experience as OK
c. 36% of the providers rated their experience as Occasionally/Very Frustration.

Figure 20 First Step Provider Ratings of the Change in the CRO (N=912)



Providers were further asked to explain the reasons for their frustration with the change. Two hundred and thirty one (N=231) providers responded with open-ended comments. Qualitative analyses of these written comments found that the reasons for frustration included:

a. 24.7% shared that EDS could not answer questions or was not helpful in their response.
b. 16.5% shared general complaints about the billing process.
c. 11.3% of the providers found the policies and procedures were complicated or confusing.
d. 11.3% reported problems with Prior Authorizations.
e. 10.8% stated that EDS was not family friendly, particularly in their Explanations of Benefits (EOB) statements.
f. 10.8% reported that EDS frequently denied payment and their reasons were unclear.

Summary of Findings

This section summarizes the key results presented earlier, and organizes them under major findings that can be made from this independent evaluation. As one views these findings, please recall the caveats presented in the introduction. Because the evaluation was limited to examining data immediately following the policy changes (up to 15-18 months), some findings may be confounded with the fact that the state was still in a period of fully executing the policies under investigation, and that any changes or trends found may be due to the policy changes or may be the result of other factors, factors that cannot be controlled because of the limited time frame.

1. What impact have changes in First Steps had on the number and types of children and families entering and receiving services?

There were four major findings from examining the impact of changes in First Steps on the number and types of children and families entering the First Steps system.

1. There were no major variations in the number of children referred to First Steps; however, there were decreases in the number children evaluated and entering the First Steps system.

a. The number of children and families referred, enrolled, and evaluated has increased each year from 1998 through 2005. From 2005 to 2006, the number of children referred, enrolled, and evaluated dropped approximately 5%. In 2007, the number of referrals jumped back to 2005 levels, while the number of referrals remained level and the number of evaluations continued to decline.
b. From 2004 through 2006, the total number of new children entering First Steps declined, dropping 5.3% in 2005 and another 9.4% in 2006. In 2007, the number of new children entering First Steps increased slightly (3.3%).
c. The December child count, a one-day count of children receiving First Steps services, has steadily decreased since 2004, dropping 3.0% in 2005, 8.3% in 2006, and another 5.6% in 2007.
d. Decreasing the number of children entering and receiving services from First Steps by 15% was the reported goal of the state, and reflected its efforts to manage costs and insure the children with the highest needs were served.
e. Despite the decline in children served, Indiana still ranks high compared with other states in terms of the proportion of children served.

2. There were no major variations in the proportion of children served by race, disability, or family income; however, there was a noticeable decline in the number and proportion of infants (children less than 12 months of age) receiving services.

a. Over the past 10 years, the majority of children First Steps has served are children who demonstrate significant delays in one or more areas of development. The second largest eligible population First Steps has served is children with identified medical conditions (e.g., genetic disorders, physical disabilities). From 2004 through 2007, the proportion of children in First Steps because of a diagnosed medical condition has stayed relatively consistent, ranging form 26% – 31% of the First Steps population.

b. The proportion of children entering First Steps who are white versus minority has declined slightly (3%) from 2005 to 2007. In 2007, 75% of First Steps children were white.
c. Children living in families at the two lowest levels of income (0-350% federal poverty guideline) represent the majority of children receiving First Steps—85% of all children in 2007. Since 2005, there has been a very small downward trend in the proportion of children served living in families at the top six (of nine) levels of family income since 2005.
d. From the December child count, the proportion of children under 12 months of age has declined 25% since 2004, 8% from 2006 to 2007.
e. From the First Steps Provider Survey, 15 EDT members commented noting their concerns about the technical accuracy of the AEPS, with seven of those providers specifically identifying children less than 12 months of age with developmental delays.

3. There was no discernable trend or variation in the proportion of families living in rural, metro/rural, or urban settings; however, families who live in rural areas are less likely to access and receive First Steps services.

a. In 2006, First Steps in rural counties served approximately 4.4% of the total birth to three population. This compares with the state average of 4.9%, and a 5.7% average in urban counties.
b. Possible factors explaining this discrepancy, such as family choice, the quality of child find efforts or access to services were not investigated but may warrant further investigation.

4. There was no discernable trend or variation in the number of families declining services during enrollment in First Steps. There was a small increase over time in the number of families who withdrew from First Steps after enrollment. In 2007, a large percentage of families declined enrollment (23%) or withdrew from services (20%).

a. Approximately 23% of all referrals to First Steps end because families declined enrollment with no further reasons recorded into the state database.
b. In 2007, 20.4% of all exiting children were due to families choosing to withdraw from services.
c. The rates of families declining First Step during enrollment have remained constant since 2003/04; however, the percentage of families withdrawing from services increased 9%.
d. A very small number of families indicated that they declined or withdrew from First Steps due to cost participation and cost recovery requirements.

2. What impact have changes in First Steps had on the types and amounts of services children and families receive in First Steps?

There were three major findings from examining the impact of changes in First Steps on the types and amounts of services children and families received from First Steps.

1. **There were minimal variations in the average amount of services children and families received in general; however, there were variations in service amounts/costs when broken down by family income levels.**

    a. In 2007, children received an average of 5.1 hours of service per month (not including service coordination). This figure represents a drop of .9 hours of service per month since 2005, only .2 hours since 2004. Children with medical conditions received an average of 6 hours of service per month in 2007, while children with developmental delays received an average of 5 hours of service per month.
    b. In 2004, there were no significant differences in the average number of hours of service received by families across all nine income levels. In 2007, however, there were two noticeable patterns. First, the wealthiest and poorest families received about the same level of services, which were higher than all other income levels. Second, beginning with the poorest families and moving through the low and middle to upper middle-income levels, there is a distinct pattern in which service costs decreased as family income rose. Families in the middle to upper middle income levels received fewer services than families in low or high income levels.

2. **There was a slight decline in the number of services children were initially authorized following policy changes, most likely due to reported provider shortages and its impact on initial service recommendations.**

    a. From 2004 to 2007, the average number of services initially authorized for entering children declined from 2.0 services to 1.7 services.
    b. During this four-year period, the percentage of children initially authorized to receive each of the following services declined: developmental therapy (3.5%), occupational therapy (26%), physical therapy (10.8%), and speech therapy (10.9%).
    c. Statistical comparisons of the number of children initially authorized to receive services one year before and one year after the May 2006 and October 2006 policy changes showed differences ranging from 2% (Physical Therapy) to 9% (Developmental Therapy) fewer children.
    d. Service providers, including current service coordinators and ED Team members reported that 86% of the children they saw received recommended levels of services.
    e. For the children who did not receive the recommended services (or service levels), providers reported that the *availability of providers* was an influence for an average 47% of the service recommendations for entering children. These same providers noted that provider availability (and the lack thereof) resulted in 37% of children receiving only some services and 5% of the children receiving none of their recommended services.
    f. When a recommended service was not available, the IFSP team generally substituted another service (e.g., developmental therapy for speech therapy).

3. **When children are authorized services, most all children receive those services.**

    a. From 2002 through 2006, 91-97% of children received authorized services.

3. What impact have changes in First Steps had on the costs of services?

1. There were declines in both total direct service costs and average monthly service costs per child over time.

a. In 2007, First Steps services (not including service coordination) cost approximately $43 million. This figure represents a drop of approximately $7 million when compared with 2004.
b. This 13% drop closely parallels two events: the drop in the number of children served and slight decreases in the average hours served —closely associated with changes in eligibility and implementation of the ED Teams; and, service rate cuts that took place in 2004.
c. In 2007, the average monthly cost for services (except service coordination) was $399 per child. This figure reflects a $25/month drop in the average service costs for children since 2004. This drop in average monthly costs may be explained, in part, by the 2004 service rate cuts that took effect in 2004.

2. There were changes in the average monthly service costs per child when disaggregated by family income level—families at middle to upper middle-income levels received fewer services and therefore incurred fewer costs than families at the lowest and highest levels of income.

a. In 2004, the average monthly cost for direct services, not including service coordination, did not appear to be influenced by family income—there was no observable pattern or trend when looking across the nine income levels tracked by First Steps.
b. In 2007, there was a discernable pattern. Average monthly costs for services were comparable for the three lowest levels of income, but steadily decline over the next four income levels, before rising for the two highest income levels.

3. The expense associated with cost participation is far outweighed by the amount of revenue recovered.

a. For the first six months of 2008, First Steps recovered a total of $5,555,660.80 from Medicaid, family co-pay, and third party insurance.
b. Cost recovery expenses totaled approximately $43,200.

4. What impact have changes in First Steps had on the quality of services provided?

1. The use of the AEPS for determining eligibility has generated mixed results that warrant further investigation and discussion concerning its use as the assessment tool used.

a. Half (49%) of the ED Team members surveyed indicated they were completely comfortable administering the tool. While 42% indicated they were reasonably comfortable, the reasons for sources of discomfort (issues with the instrument, roles and practices, insufficient training) need to be identified and addressed.
b. A large majority of the ED Team members surveyed (99%) indicated that they used both direct assessment and parent interview procedures.
c. A small number of the ED Team members surveyed expressed two major concerns with the use of the AEPS. First, many questioned its validity for accurately identifying developmental delays in infants and children with speech and language delays. Second, EDT members expressed concerns that administering the AEPS in areas outside their discipline may constitute a violation of their profession's scope of practice. Analyses of the State Practice Acts and conversations with the professional organizations suggest that there is neither consensus nor definitive guidance on this matter.
d. Data presented earlier showing a decline in the percentage of infants receiving First Steps services suggests that concerns about the AEPS' technical adequacy for this age group may be founded.
e. State officials have noted that ED Teams are required to use the AEPS, but may supplement its use with other assessment instruments and the use of informed clinical opinion in determining both eligibility and IFSP outcomes.

2. There have been significant changes in the multidisciplinary nature of initial IFSP meetings, with an increase in the number of meetings where no members of the ED Team were present, and a decrease in the number of meetings in which two or more disciplines are present.

a. In 2007, at least one member of the EDT attended 64% of the initial IFSP meetings; 36% of these initial meetings occurred between the family and service coordinator without a representative from the evaluation team.
b. The percentage of IFSP meetings with multiple disciplines present has dramatically decreased, going from 25% of all initial IFSP meetings in 2005 to 4% in 2007. Initial IFSPs are written with minimal, and sometimes, with no direct input from multiple disciplines. In addition, goals and services that reflect the expertise of a particular discipline (e.g., speech/language pathologists) may be written without the input and guidance of that discipline.
c. The state reported that the purpose for establishing a common rate for IFSP attendance, which reduced the reimbursement for most providers, was to redistribute finite provider resources and insure direct service needs were addressed, and avoid another across the board pay cut like that which occurred in 2004.

3. Families rated the quality of First Steps services very high; however, a significant percentage of families have declined enrollment in or withdrawn from First Steps.

a. Since 2004, the number of families declining First Steps at enrollment has increased dramatically. In 2007, over 4600 families declined, representing 25% of all referrals. Unfortunately, data as to why families declined were not always recorded in the state's data system.
b. Although there was no variation or changes in the proportion of families declining First Steps services during the enrollment period, there was a high percentage of families (23%) who declined services.
c. There has been a small increase in the number and proportion of families withdrawing from First Steps services, with 20% of all children exiting First Steps in 2007 because of families choosing to withdraw their child from services.
d. A very small number of families who had declined or withdrawn from services participated in the survey that rated family satisfaction with the quality of services.

4. There has been a significant increase in the caseloads of service coordinators closely following related policy changes. Service coordinators and families generally rated the majority of their services very high, although some services that require greater skill and time were rated less highly.

a. Caseloads of service coordinators have increased significantly over the past four years, jumping from an estimated average caseload of 40 families in 2005, to reported average caseloads of approximately 60 families in 2007. Anecdotal reports from SPOEs after data collection indicate that caseloads may have risen even more since this evaluation's data collection efforts.
b. While caseloads have increased, the state noted that an additional $1 million was spent on service coordination to recruit high caliber professionals and to offset office tasks to SPOE clerical workers.
c. Service coordinators reported that they were able to carry out most of their essential core responsibilities most or all of the time. However, there were core functions that, while carried out, were not carried out as well as others—providing the ongoing information and support families need, helping them to learn the skills to advocate for their child over time, connecting with important community resources, and insuring that the team of providers and family members work together and in concert.
d. Family ratings closely paralleled service coordinator ratings, with most services rated highly; however, some services were carried out less often.

5. What impact have changes in First Steps had on the recruitment and retention of service providers?

1. There have been changes in the number of providers recruited and retained—for most disciplines, First Steps is losing more providers than it is recruiting and retaining. This loss is creating provider shortages in some areas, which are affecting service recommendations and service delivery.

a. From 2004 through 2007, the number of providers has declined by 18%; representing declines in all disciplines, except developmental therapists. During this four-year

period, First Steps lost more Occupational, Physical, and Speech Therapists than it recruited.

b. Only 42% of the providers working in 2004 were still working in 2007, suggesting significant turnover in the field.
c. Several data sources suggest that First Steps is experiencing provider shortages, particularly for occupational and speech therapists.
d. Data also suggests that these shortages are having an impact on the availability of services, what is authorized, and what children and families receive.

2. Providers who had left or were contemplating leaving the First Steps system indicated that changes in the system, frustration with the billing process, and their overall reimbursement (including past rate cuts) were the primary reasons.

a. First Steps providers reported they left the system (in the past five years) or are thinking of leaving the system because of the multiple changes that have occurred, frustrations with the billing system, and cuts in their reimbursement rates for providing services and for attending IFSP meetings.
b. From the First Steps Provider Survey, over 600 providers offered unsolicited comments at the end of the survey. Half of those providers (N=327) commented about some level of difficulty working within the current First Steps system.

3. In order to effectively insure adequate numbers of highly qualified providers, a comprehensive system of personnel development (CSPD) needs to be fully in place. Currently, several elements of a CSPD are in place that address provider standards and insure initial and ongoing training to promote a well-trained work force. There are, however, several critical elements missing that affect First Step's ability to address provider shortages and future personnel needs in a comprehensive and collaborative manner.

a. A review of First Steps' CSPD indicate that the following elements are in place: clear academic and personnel standards, and a system for ongoing professional development.
b. Less than half of the providers surveyed (44%) indicated that most or all of the training offered through the current professional development system (UTS-ProKids) offered new ideas or strategies they could use. Further investigation into the training content and/or strategies used may be warranted to determine why the majority of providers reported that most/all training was not useful.
c. This same review of First Steps' CSPD indicate the following elements are missing and/or weak: statewide plan for recruitment and retention of providers; system for performance evaluation to guide decisions concerning development, retention, and promotion; central data system to analyze personnel needs, and maintain up-to-date information on current personnel capacity and professional development resources; and strong collaborative efforts with other agency efforts, the Governor's Interagency Coordinating Council, and institutes of higher education and private training entities.

External Review and Audit

of the

Early Childhood Center
Indiana Institute on Disability and Community
Indiana University

Evaluation of Indiana's *First Steps* Early Intervention System

by

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Submitted to

Indiana *First Steps* Early Intervention System
Bureau of Child Development Services
Division of Disability and Rehabilitative Services
State of Indiana Family and Social Services Administration

November 17, 2008

Executive Summary

Findings from an external review and audit of the evaluation of the First Steps early intervention system conducted by the Indiana Institute on Disability and Community, Indiana University, are the focus of this report. The First Steps Evaluation was conducted at the request of the State of Indiana's Division of Disability and Rehabilitation Services to assess the impact of policy and program changes in the First Steps system. The changes included: (1) eliminating the biologically at-risk category and increasing the amount of developmental delay necessary for eligibility determination, (2) establishing Eligibility Determination Teams, (3) adopting a single child assessment tool state-wide, (4) changing the central reimbursement office and procedures, (5) reducing the reimbursement for providers to attend IFSP meetings, (6) increasing the costs to families for participation in First Steps, and (7) the reassignment of service coordinators to regional Clusters. The analyses conducted by the First Steps evaluators included changes in the number of referrals, intakes, evaluations, and IFSPs developed; the time from referral/eligibility determination to IFSP development; number of service providers attending IFSP meetings; types of services provided to First Steps children and families; parent participation and nonparticipation in Fist Steps; services and service expenditures by county, Cluster, and family income; service authorization and provision; number and types of services per child; service coordinator caseloads; number of service providers entering and exiting First Steps; and family assessment of the quality of First Steps practices.

The major findings in the First Steps Evaluation report showed that the number of children entering First Steps has decreased, the number of initial IFSPs that have been developed has decreased, the number of days to develop IFSPs from referral to plan development has decreased, the percentage of the birth to age three population served by First Steps has decreased, the percent of children authorized to receive the most frequently provided services has decreased, the hours of services provided to First Steps children has remained essentially the same, the total First Steps expenditures has decreased, the average monthly costs per child have decreased, the costs for all but one First Steps direct service has decreased, the average monthly cost per child has decreased for nearly all First Steps services, and parents for the most part judge First Steps practices as being of high quality. Several potentially troubling findings included increases in the number of initial IFSP meetings that are not attended by a service provider, the large number and percentage of families who refuse/decline First Steps services and who withdraw or fail to participate in First Steps, and a large number of providers exiting First Steps and fewer providers entering the system.

Comparisons of the First Steps findings with data from other states, as well as data collected nationally, showed the percent of the birth to three population served by First Steps has been decreasing whereas most other states are showing increases, the variability in the percent of the birth to three population served in the different Indiana counties is much like that found in other states, the types of child services provided to First Steps participants is more alike than different compared to other states, the percent of child services included on IFSPs in First Steps tends to be larger than most other states, the average number of child service hours per month in First Steps is more similar than different compared to other states, and parents judgments of the quality of early intervention services in First Steps is very much like that reported by parents in other states.

The external review and audit of the First Steps Evaluation indicated that the conceptualization and implementation of the evaluation plan (quality), the types of analyses performed to answer the evaluation questions (appropriateness), and the interpretations and conclusions drawn from the findings (accuracy), all met or exceeded currently acceptable evaluation procedures and practices. The First Steps Evaluation was considered one of the best examples of an evaluation of a state-level early intervention system, and should be considered a blueprint for how useful information can be gleaned to make evidence-based policy and program decisions.

External Review and Audit of the Indiana Institute on Disability and Community Evaluation of Indiana's *First Steps* Early Intervention System

The Early Childhood Center, Indiana Institute on Disability and Community, Indiana's University Center for Excellence in Developmental Disabilities, under the leadership of Dr. Michael Conn-Powers, recently completed an evaluation of Indiana's First Steps Early Intervention System (Conn-Powers, Piper, & Traub, 2008). The evaluation (hereafter referred to as the First Steps Evaluation) was conducted at the request of the State of Indiana's Division of Disability and Rehabilitation Services, Family and Social Services Administration. The main purpose of the evaluation was to assess the impact of recent policy and program changes in the First Steps system. The external review and audit was completed on the September 26, 2008 version of the First Steps evaluation.

First Steps

The First Steps early intervention system is one of 56 early intervention programs and systems in all 50 States, the District of Columbia, and 5 U.S. Jurisdictions and Outlying Areas. First Steps, as well as the other early intervention programs and systems, were first authorized as part of P.L. 94-124, Part H of the Education for All Handicapped Children's Act, and most recently reauthorized as part of P.L. 108-446, Part C of the Individuals with Disabilities Education Improvement Act.

Indiana's First Steps system is a family-centered, locally based, coordinated program that provides early intervention services to infants and toddlers with identified medical conditions and disabilities or developmental delays, and their families (Indiana Bureau of Child Development Services, n.d.-a; Indiana First Steps, n.d.). Eligibility determination, IFSP

development, and service provision are organized into nine Clusters, each including 5 to 16 counties. Each Cluster includes a System Point of Entry (SPOE), a Eligibility Determination Team, Service Coordinators, and a cadre of Private Providers (service providers). The specific components and elements of First Steps are described in a number of documents (e.g., Indiana Bureau of Child Development Services, n.d.-a; Indiana First Steps, n.d.; Traub, 2007).

Policy and Program Changes

A number of emerging concerns about First Steps prompted both policy and program changes to the early intervention system which were implemented starting in earnest in 2004, and for all intents and purposes completed in 2006. (Some changes began in 2003.) The changes occurred in a number of policy and practices areas: (1) eligibility criteria (eliminating the biologically at-risk category and increasing the amount of developmental delay necessary for a child to be eligible) (Indiana First Steps, 2006), (2) the establishment of Eligibility Determination Teams (Indiana Bureau of Child Development Services, n.d.-b), (3) state-wide adoption of a single child assessment tool (Bricker, 2002), (4) changes in the central reimbursement office and procedures, (5) reduced reimbursement for providers to attend IFSP meetings, (6) increased costs to families for participation in First Steps, and (7) reassignment of service coordinators to Clusters. Implementation of changes in each of these areas occurred at different times from 2004 to 2006.

The changes that occurred in First Steps overlapped and were in most cases implemented during the same periods of time and not in a step-by-step fashion. This set of conditions makes it difficult to identify which specific changes were the sources of any observed effects constituting the focus of evaluation. In evaluation research terminology, this is described as multi-treatment interference (Campbell & Stanley, 1963). Therefore, changes that did occur can only be

attributed to the aggregate policy and practice changes and not any one event, at least with any level of confidence.

Recommendations for a First Steps Evaluation

The changes that were made in the First Steps system not unexpectedly raised important issues and concerns among stakeholders and other constituency groups throughout Indiana. A working document prepared by Lora Miller (2006) summarized the concerns and recommendations made at a First Steps Stakeholder meeting. Input was provided by other interested parties as well (e.g., INARF, 2007). A First Steps Audit Committee Work Group (ARC of Indiana, 2007) subsequently generated more than 75 questions and recommendations in four areas (demographics, fiscal, policy changes, and administration and infrastructure) which were prioritized based on ratings of importance of each recommendation by the committee members. The final list of 40 questions that constituted the focus of the evaluation by the Indiana Institute on Disability and Community are included in Appendix A.

First Steps Evaluation

The evaluation of Indiana's First Steps early intervention system by the Indiana Institute on Disability and Community (Conn-Powers et al., 2008) used both existing data and newly collected data to determine the manner in which policy, program, and practice changes influenced the First Steps system. Seven major sources of data were used by the evaluators: (1) provider (including services coordinators) survey, (2) family survey, (3) First Steps Administration (child counts, service expenditures, types of services, etc.), (4) EDS (Electronic Data Systems) who manages the First Steps Central Reimbursement System (demographics, services, and cost data), (5) Indiana Family and Social Services Administration Data Warehouse

(child referral and intake, family income and poverty, service utilization and reimbursement, etc.), (6) state and national data, and (7) published studies of professional development practices.

The data obtained from these various sources were used to answer six main questions (and the 45 subquestions listed in Appendix A). The six main questions were:

(1) Have recent policy changes (e.g., eligibility, cost participation, evaluation) had an effect on the referrals, intakes, evaluations, eligibility determinations, and initial IFSPs conducted by First Steps?

(2) Have these recent policy changes had an effect on the number of children and families served by First Steps?

(3) Have these recent policy changes had an effect on the First Steps services available to children and families?

(4) What are the costs of providing First Steps services? Have these recent policy changes had an effect on these costs?

(5) How well are First Steps providers carrying out recent state policies concerning evaluation (Eligibility Determination Teams, use of the AEPS)?

(6) How can First Steps improve the quantity and quality of services available to all families? (Conn-Powers et al., 2008)

The largest majority of the data were analyzed by year (depending on the focus of analysis) to discern patterns of changes in the variables of interest *prior to*, *during*, and *after* the First Steps policy, program, and practice changes. The data analyzed year-by-year focused on changes in First Steps and their effects, and constitutes what is generally described as interrupted time-series analysis (Shadish, Cook, & Campbell, 2002). The procedure has been found effective in detecting the effects of interventions (e.g., policy changes) on outcomes of interest (e.g.,

Glass, 1997). Time-series analysis in developmental disabilities research, for example, is often used to determine changes in the services provided to and outcomes of persons with disabilities (e.g., Braddock, Rizzolo, & Hemp, 2004; Lakin, Prouty, Coucouvanis, & Polister, 2004; Stancliffe & Lakin, 2006).

The analyses performed by Conn-Powers et al. (2008) included, but were not limited to, changes in numbers of referrals, intakes, evaluations, and IFSPs developed; time from referral to IFSP development; number of providers attending IFSP meetings; types of services provided to First Steps children and families; parent acceptance or rejection of First Steps services; services and expenditures by county, Clusters, and family income; family poverty levels; service authorization and provision; number and hours of services per child; service coordinator caseloads; overall and average service expenditures; numbers of service providers entering and exiting First Steps; and parents' judgments of First Steps practices. These ***primary*** analyses were supplemented by other analyses, comparisons, etc. to answer questions not addressed by the primary analyses or to "tease apart" patterns of changes in the data.

The First Steps Evaluation was a multi-source, multi-measure, multi-method approach to evaluation (Mark & Shotland, 1987; McConney, 2002; Shadish, Cook, & Leviton, 1991). The evaluation included a combination of outcome evaluation, impact evaluation, and cost benefit analyses (Mohr, 1995; U.S. Government Accountability Office, 2005).

External Review and Audit

The external review and audit of the Indiana Institute on Disability and Community First Steps Evaluation focused on two broad areas of second-level assessment and analysis:

(1) Review the quality, appropriateness, and accuracy of the First Steps Evaluation approach, analyses, and findings.

(2) Contrast the findings in the First Steps Evaluation report with national, state, and other published and unpublished data to determine how Indiana's First Steps early intervention system compares to other states and other early intervention programs and systems.

The external reviewer was specifically asked to place the First Steps Evaluation findings in the context of a national perspective (Lora Miller, personal communication, August 18, 2008). This was accomplished by comparing findings in the First Steps Evaluation report with findings from other early intervention program evaluations and studies.

The external review and audit of the methods used by and findings reported in the First Steps Evaluation was approached as second-level evaluation, or an evaluation of an evaluation (Larson & Berliner, 1983). For each of the six research questions posed by Conn-Powers et al. (2008), as well as the 45 subquestions, the quality, appropriateness, and accuracy of the analyses and findings were assessed as *highly acceptable*, *acceptable*, *minimally acceptable*, or *not acceptable.* (A *not applicable* rating was also used if the question was not amenable to a quantitative judgment.) *Quality* was assessed in terms of the integrity of and logic in conceptualizing and conducting the analyses. *Appropriateness* was assessed in terms of the type(s) of analyses of the evaluation data. *Accuracy* was assessed in terms of the interpretation of the findings.

The manner in which the findings were similar or different from those for other states or found in other reports, was accomplished by comparing and contrasting Indiana data with data found in other sources. Table I lists the major (but not all) sources of information that were used for comparative purposes. The comparative data, to the extent possible, involved contrasts of patterns of changes or differences in the data in First Steps Evaluation compared to other states

Table I
Sources of Information and Data for Comparing First Steps Findings with Other Evaluation Results

Bailey, D. B., Jr., Hebbeler, K., Scarborough, A., Spiker, D., & Mallik, S. (2004). First experiences with early intervention: A national perspective [Electronic version]. *Pediatrics, 113*, 887-896.

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Fromewick, J. (2003, December). *State and local influences on Part C early intervention enrollment*. Poster presented at the 23rd annual Zero to Three National Training Institute Conference, New Orleans, LA.

Fromewick, J. (2004, November). *Influences on early intervention enrollment: A multilevel analysis*. Paper presented at the American Public Health Association 132nd annual meeting, Washington, DC.

Fromewick, J., & Dunst, C. J. (2005, August). *State and local influences on enrollment in Part C infant/toddler programs*. Asheville, NC: Orelena Hawks Puckett Institute.

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Louisiana State University, National Center for Special Education Accountability Monitoring. (2006a). *Infants and toddlers receiving early intervention services*. New Orleans, LA: Author.

Louisiana State University, National Center for Special Education Accountability Monitoring. (Louisiana State University, 2006b). *State ranks: Part C*. New Orleans, LA: Author. Retrieved October 6, 2008, from www.monitoringcenter.lsuhsc.edu/Stateranks_C.htm.

Reinhard, J. S. (2006, November). *A report on Virginia's Part C early intervention system*. Richmond, VA: Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services.

Roberts, R. N., Behl, D. D., Goetze, L. D., Johnson, R. L., Gordon, M., & Nordfelt, E. (2005). *How important are early intervention service coordinators in the lives of families?* Logan: Utah State University, Early Intervention Research Institute. Retrieved on June 5, 2005, from http://eiri.usa.edu/PacRim%202005.pdf.

inasmuch as a main interest was child, cost, and program changes associated with changes in policy and practice.

Major Findings in the First Steps Evaluation

Quality, Appropriateness and Accuracy of the First Steps Evaluation

Conn-Powers et al. (2008) employed an approach to evaluation referred to as data mining (Dunham, 2003; Han & Kamber, 2006). Data mining is a process of collating and integrating information from multiple sources for the purpose of discerning patterns in the data and to identify information for answering questions important to stakeholders. The First Steps Evaluation represents one of the best examples of data mining in a state-level evaluation of an IDEA Part C early intervention program or system. The report and its methodology represent a blueprint for how an evaluation of a state-level system can proceed and yield information useful for assessing policy change impact and identifying "places in the system" needing further attention in order to make evidence-based policy and program decisions.

Table II shows the overall ratings of the *quality*, *appropriateness*, and *accuracy* of the First Steps Evaluation. The ratings of the subquestions in each evaluation section of the report are included in Appendix B. The largest number of overall ratings (89%) were judged *highly acceptable* as were the ratings of the individual evaluation questions (Appendix B). *The evaluation and audit is therefore considered high quality, the approach highly appropriate in terms of the types of analyses used to answer the stated questions, and highly accurate in terms of the findings, results, and interpretations of the data.* Comments on specific findings for each main evaluation question are made next.

1. *Have recent policy changes (e.g., eligibility, cost participation, evaluation) had an effect on the referrals, intakes, evaluations, eligibility determination, and initials IFSPs*

Table II
Overall Judgments of the Quality, Appropriateness, and Accuracy of the First Steps Evaluation

	Evaluation Dimension[b]		
Main Questions[a]	Quality	Appropriateness	Accuracy
Have policy changes affected the First Steps system?	HA	HA	HA
Have policy changes affected the numbers of children served by First Steps?	HA	AC	HA
Have policy changes affected services to children and families?	HA	HA	HA
What are the costs of First Steps services and have policy changes affected the costs?	HA	HA	HA
How well are providers implementing new child assessment procedures?	HA	AC	HA
How can First Steps improve quality and quantity of services?	HA	HA	HA

[a] Abbreviated evaluation questions. See p. 6 for the complete list of questions.
[b] HA = Highly acceptable, AC = Acceptable, MA = Minimally acceptable, and NA = Not acceptable.

conducted by First Steps? Findings in the First Steps report, depicting patterns of change in referrals, intakes, evaluations, and IFSPs over time (Figures 1, 2, 3, 4, and 5) are presented the ways in which similar data are typically represented (e.g., Stancliffe & Lakin, 2006). The results show the anticipated decreases in the numbers of children enrolled in and served by First Steps.[1] This is shown, for example, in Figure I in terms of newly developed IFSPs. There was a steep increase in the number of initial IFSPs developed prior to the First Steps policy and program changes, a leveling off during the changes, and a decrease in new IFSPs after the changes were (for the most part) fully implemented.

[1] Tables and figures in this external review and audit are designated by Roman numerals whereas those in the First Steps report are designated by Arabic numerals corresponding to those in their evaluation. The table and figure numbers cited in this external review correspond to those in the October 13, 2008 version of the First Steps evaluation.

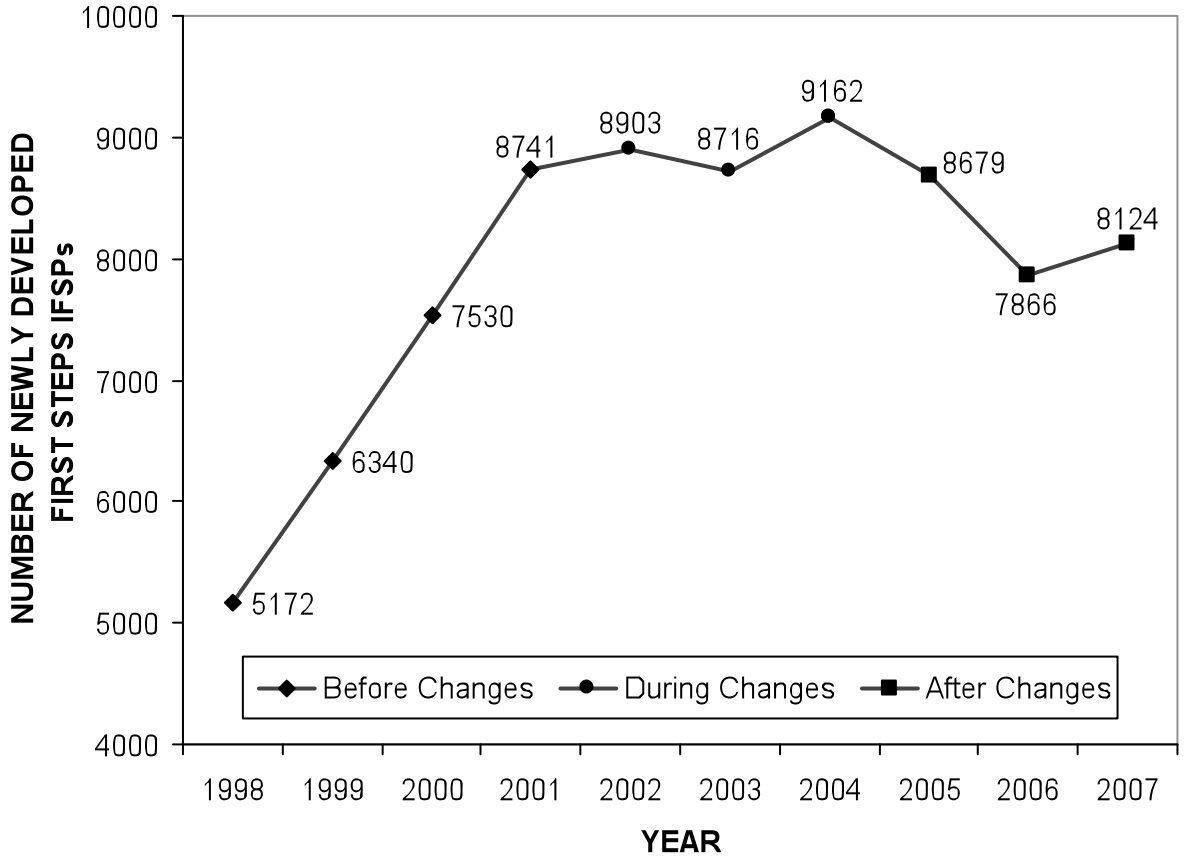

FIGURE I. Patterns of changes in IFSPs initially developed for First Steps participants before, during, and after the state-wide policy and program changes.

The variability reported by Cluster in these same program and practice measures (Figures 3 and 4) is not atypical, and is very much like that found in similar kinds of analyses found in other reports (e.g., Dunst, Hamby, & Fromewick, 2004; Fromewick & Dunst, 2005).

Two findings included in the first Results section of the First Steps Evaluation "stand out" as potentially problematic, and therefore may be an indication of some negative impact of the First Steps policy changes. The first is the large number of IFSP meetings where no service provider is present (Table 8). Figure II shows the percent of IFSP meetings not attended by a

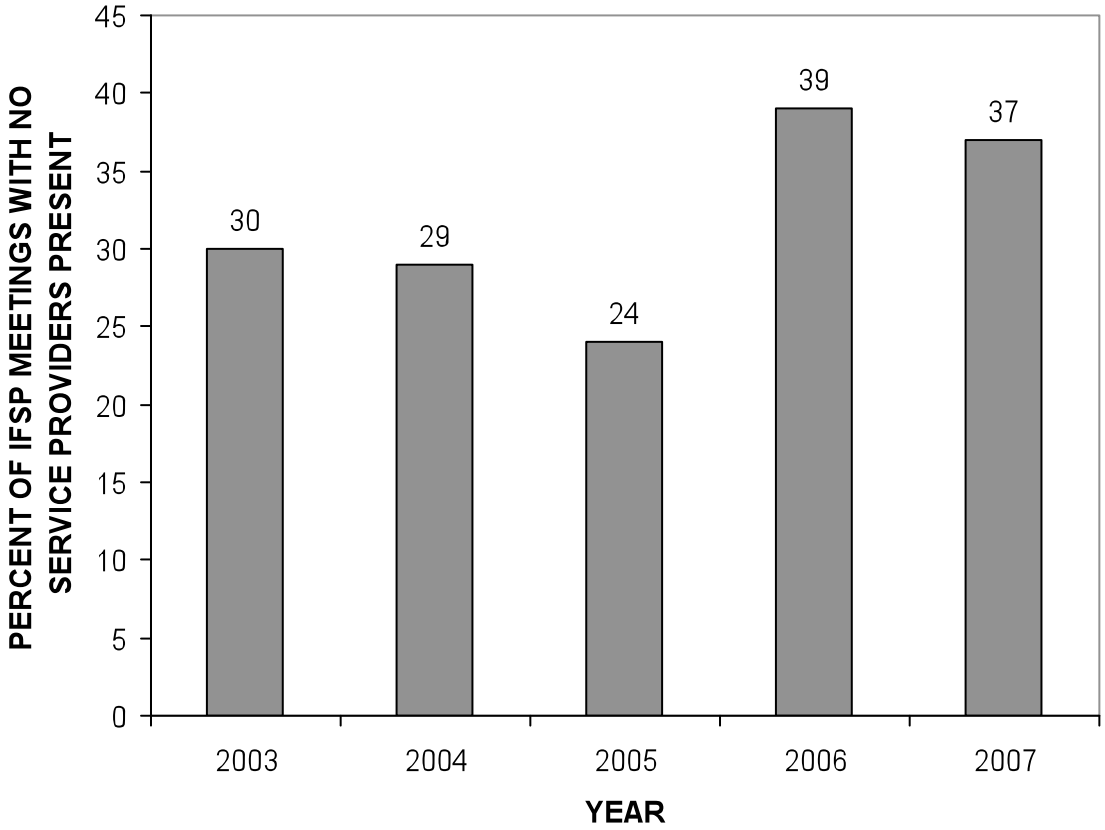

FIGURE II. Percentage of initial IFSP meetings where no service provider other than the service coordinator and parent developed the IFSP.

provider for the five year period of time from 2003 to 2007. The percents for all years are higher than one would expect, and especially so in 2006 and 2007, where nearly 40% of the meetings were not attended by an early intervention provider other than a service coordinator. To the extent that a service coordinator is not knowledgeable about child development and best child and parent-- child intervention practices, IFSP content may not be appropriate. Additionally, if the service coordinator was not a member of the Eligibility Determination Team, the basis for any prescribed service might not be informed.

The second finding that raises concerns is the large number of families who declined to participate in First Steps at the time of referral and eligibility determination, withdrew after

enrollment, or failed to participate in the IFSP services for different reasons (Table 10). Figure III shows the sum of the number of parents who (1) declined participation at referral, (2) withdrew after enrollment, (3) failed to participate in IFSP services, (4) declined participation due to family incurred costs, and (5) failed to cooperate with CSHCS procedures (First Steps Evaluation report, Table 10) divided by the total number of eligible children (First Steps Evaluation report, Figure 6). The results shown in Figure III indicate the percent of families declining to participate and failing to participate in First Steps has remained the same before and after the policy and program changes. The number of nonparticipants seems exceedingly high,

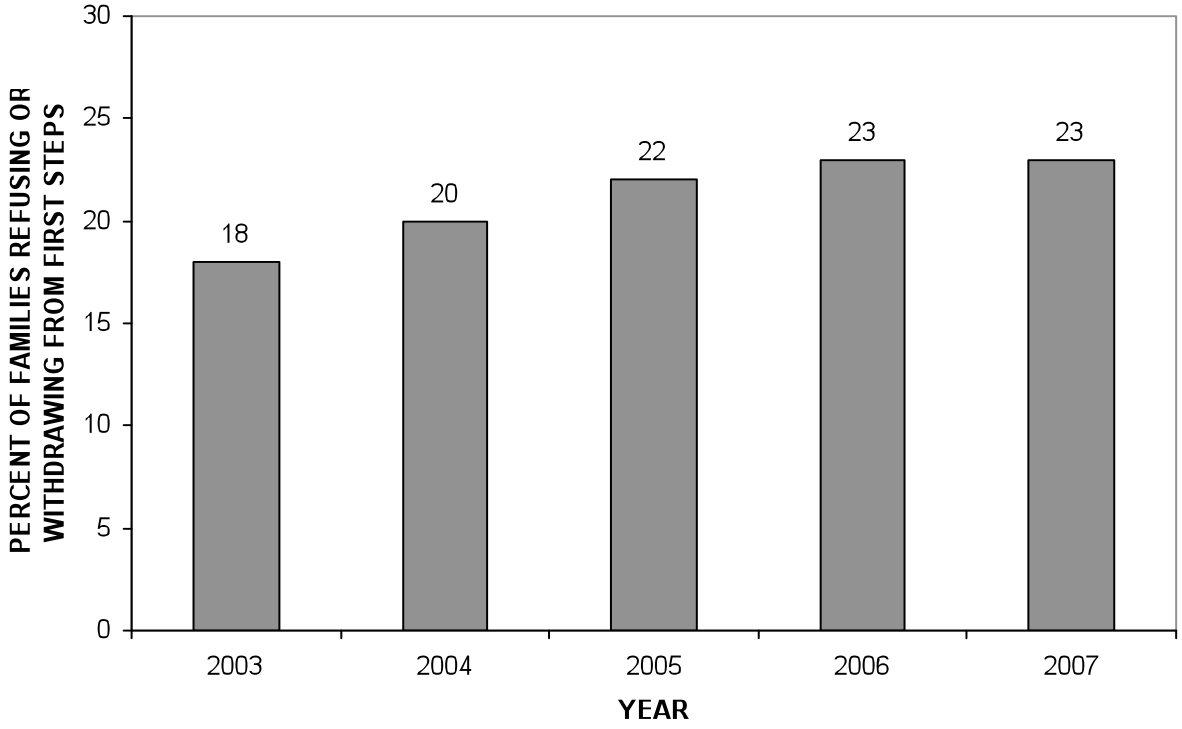

FIGURE III. Percentage of parents who declined First Steps participation at the time of referral, withdrew from First Steps for different reasons, or failed to participate with First Steps providers.

and is especially the case since the total number of children and families served by First Steps has decreased. The findings shown in Figure III deserve further attention to determine what may be operating to cause increases in nonparticipation.

2. *Have recent policy changes had an effect on the numbers of children and families served by First Steps?* The results to answer this question in the First Steps Evaluation, and the ways in which the findings are displayed, are very similar to how others report similar results (e.g., Mott & Dunst, 2006). The findings as a whole are very much like what others have found when examining data at county or regional (Cluster) levels (Fromewick, 2003, 2004). The findings, taken together, portray the effects of the First Steps policy and program changes, and where changes have occurred (or remained the same) in terms of the children and families served. The findings, for example, show that Indiana's ranking in terms of states serving the largest percentage of the birth to three population has changed from fourth before the policy and program changes to seventh after the changes (Table 12), an indication of one of the intended system's effects.

The variability in the percentage of the birth to three population served in each county (Table 11) and Cluster (Table 17) is neither unusual nor unexpected. The reasons why variability exists is not explicitly clear, but it is of interest to note that the counties serving the smallest percentage of the birth to three population (Table 18) are some of the most economically depressed counties in Indiana (e.g., Annie E. Casey Foundation, 2007; U. S. Bureau of the Census, 2007).

One finding of particular note is the fact that so few children birth to one year of age are being served by First Steps (Figure 7). In the National Early Intervention Longitudinal Study (Hebbeler et al., 2007), the largest number of children with identified disabilities were enrolled

under a year of age (Figure IV). Inasmuch as 30% of the children in First Steps have identified conditions (Conn-Powers et al., 2008), one would expect that considerably more birth to one year olds would be served by the system. The reason why this is not the case deserves further attention.

As part of research conducted at the Tracking, Referral and Assessment Center for Excellence (www.tracecenter.info), we found that in cases where developmental assessments were used for eligibility determination for the largest majority of child referrals for early

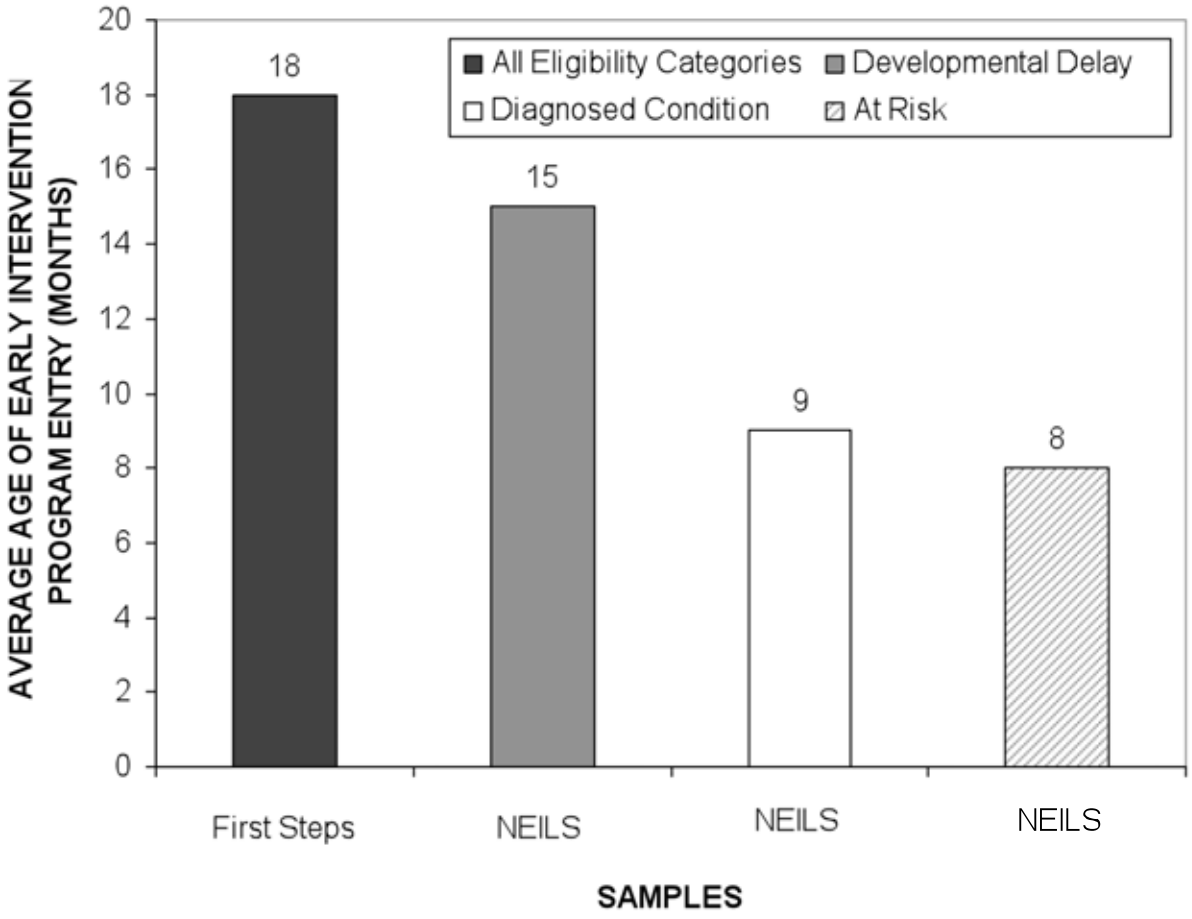

FIGURE IV. Average age of entry into early intervention for different samples of children. NEILS = National Early Intervention Longitudinal Study (Bailey, Hebbeler, & Scarborough, 2003; Hebbeler et al., 2007).

intervention, more often than not the assessment results and not the children's identified conditions were used for eligibility determination (e.g., Mott & Dunst, 2006). In situations where this is the case, there are often longer than necessary lags in eligibility determination which has the effect of delaying enrollment and increasing the age of entry into early intervention.

3. *Have recent policy changes had an effect on the First Steps services available to children and families?* Results presented in the First Steps Evaluation to answer this question indicate that most children are authorized to receive ***only*** developmental therapy (special instruction), speech therapy, physical therapy, or occupational therapy (Table 20). This is the case in almost every state in which similar analyses have been conducted (e.g., Hebbeler et al., 2007). Findings also showed that the average number of services per child authorized and provided have decreased over time (Figure 9 and Table 22), indicating that policy and program changes may have affected those decreases.

Prior to, during, and after the First Steps policy changes, children received on average four to five hours of service per month (Table 24), and that the hours of services per month varied somewhat as a function of child eligibility category (Table 25). The average hours of child services per month were also more alike than different in the nine Clusters (Tables 24 and 25). Findings showed that children, on average, have received about the same amount of the four most frequently provided services before, during, and after the First Steps policy and program changes.

The differences in the average hours of child services per month for children with developmental delays compared to those with identified conditions is almost exactly what Hebbeler et al. (2007) found in the National Early Intervention Longitudinal Study. The one finding reported in this section of the First Steps Evaluation report, as well as in other sections of

the report, that deserves comments is the fact that the percentage of children receiving developmental therapy in First Steps tends to be somewhat higher than that found in many other states.

Of special note and importance is the fact that First Steps, during the three most recent reporting periods (2005, 2006, 2007), is developing IFSPs, on average, 33 days after an eligibility determination (Figure 16). This is an indication that the First Steps system is operating efficiently in terms of delivering services as soon as possible after a child is found eligible for First Steps services. Many states, as determined from examination of Federal IDEA Part C monitoring reports, still do not comply with the 45 day limit.

The findings presented in this section of the Conn-Powers et al. (2008) evaluation to answer Question 3 are displayed in a manner similar to other reports (e.g., Hebbeler et al., 2007), and clearly show the manner in which service availability and provision have either changed or remained the same during the past four to five years.

4. *What are the costs of providing First Step services? Have recent policy changes had an effect on those costs?* The findings in the First Steps Evaluation report to answer these two questions highlight changes in First Steps. Annual expenditures have decreased 14% from 2004 to 2007 (Figure 12), and the average monthly costs per child have decreased 14% from a high of $471 in 2005 to a low of $399 in 2007 (Figure 13).

The amount of expenditures by disciplines and services have decreased, on average, by 13% between 2004 and 2007 (Table 26). The overall percent decrease for speech, physical, and occupational therapy were, respectively, 24%, 16%, and 16%. The only service/discipline showing an increase was developmental therapy (14%). The average monthly cost per child has

increased for developmental therapy (10%), decreased for speech therapy (5%), and remained essentially unchanged for physical and occupational therapy (Table 27).

The results in this sections of the First Steps Evaluation report show that the average monthly costs for all child services combined has decreased across time, and that the costs per month for serving children with identified conditions is about $100 more than that for children with developmental delays (Figure 14). The latter is very similar to that found by Hebbeler et al. (2007) in the National Early Intervention Longitudinal Study.

The costs analysis conducted by Conn-Powers et al. (2008) were done in a manner similar to others (e.g., Dunst, Brookfield, & McNutt, 1996; Grant, 2005) and the cost data analyzed using recommended procedures (Nas, 1996). As a result, the findings accurately show patterns of change in both overall First Steps expenditures and unit costs per services. The findings in this section of the First Steps Evaluation report, taken together, indicate that the costs for providing early intervention in Indiana have decreased in a manner expected as a result of the policy and program changes.

5. *How well are First Steps providers carrying out recent state policies concerning child evaluations (Eligibility Determination Teams, AEPS)?* This question was answered by Conn-Powers et al. (2008) by a content analysis of the 2007 Indiana First Steps Quality Review, different state-level documents, and by surveys of EDT members. Results of the Provider Survey indicated that about half (49%) of EDT members reported being completely comfortable administering the AEPS (Bricker, 2002). One would want ***all*** AEPS administrators to feel highly qualified. Perhaps this finding reflects the fact that statewide adoption of the AEPS has been fairly recent (10/1/06) or perhaps it reflects a need for more training.

A finding worth noting, and one that is typical when professionals from different

disciplines are administering a common assessment tool, is the concern that assessing development in areas not the focus of one's discipline may be a violation of a professional's scope of work. A properly administered assessment tool by a well-trained professional (regardless of discipline) should yield similar results (Trivette, O'Herin, & Dunst, in press). As Conn-Powers et al. (2008) point out, and which this external reviewer concurs, it is the interpretation of the findings (and not the administration of AEPS) that may be the main issue. State policy, however, clearly indicates that an EDT member can request input (or additional assessments) from a provider from the discipline in which a child is demonstrating concern or a delay (Indiana First Steps, 2006).

6. *How can First Steps improve the quality and quantity of services available to all families?* This question was answered by Conn-Powers et al. (2008) in terms of the number of qualified providers, and the extent to which policy changes affected provider availability. Findings showed, except for developmental therapists, whose numbers increased by 20% from 432 to 520 between 2004 and 2007, that all other disciplines, including speech therapists (25%), physical therapists (25%), and occupational therapists (20%), decreased during the same four year period (Table 38). Fewer providers have been entering First Steps (Table 39) than have been leaving (Table 40), and only about half of the developmental, speech, occupational, and physical therapists who were First Steps providers in 2004 were still First Steps providers in 2007 (Table 41). First Steps can expect to experience difficulties in recruiting physical therapists and occupational therapists since there have been downward trends in the number of those particular therapists in Indiana for the past eight years (Dionne, Moore, Armstrong, & Martiniano, 2006). Moreover, the numbers of both occupational and speech therapists per 10,000 people in Indiana are only about 30 (compared to 50 for physical therapists) which makes the pool of potential

applicants relatively small (Dionne et al., 2006).

The changes in provider availability associated with the First Steps policy and program changes are not unusual. As Conn-Powers et al. (2008) reported, leaving First Steps or thinking about leaving First Steps because of "changes in the system" (Figure 18), was the most frequently cited reason for not continuing to be a First Steps provider. More than one-third of the providers who left First Steps also cited "frustration with the billing process" as a reason for doing so.

The external reviewer as both a director of an early intervention program and as part of conducting research at the Tracking, Referral and Assessment Center for Excellence (www.tracecenter.info), experienced the same kind of exodus as found in the First Steps (more physical, occupational, and speech therapists leaving and more developmental therapists [special instructors] entering the system). Our own analysis of these trends found that more traditional therapists (speech, occupational, and physical) have more job prospects compared to special instructors (developmental therapists), and more often than not cited this as a reason for leaving early intervention to take positions in other kinds of organizations and programs.

First Steps Compared to Other States

The extent to which First Steps "looks" similar or different to other early intervention programs and systems was determined by comparing findings reported in the First Steps Evaluation with those found in other reports and studies (see Table I, p. 9). In some cases, findings in the First Steps Evaluation report were compared directly to those found in other sources, whereas in other cases, data in the First Steps Evaluation report were reanalyzed to make them comparable with other data. In several analyses, Indiana data found in other sources were used to compare First Steps to other states.

Eight sets of comparisons are described next: (1) changes in the percent of the birth to three population served by First Steps compared to changes in the four states contiguous to Indiana, (2) between and within state variability in the percent of the birth to three population served in early intervention, (3) the percent of different kinds of services delivered by First Steps compared to that reported in national evaluations, (4) the percent of services included on IFSPs in First Steps compared to those in states contiguous to Indiana, (5) the average hours of child services per month provided by First Steps compared to that reported in national evaluations, (6) the costs of First Steps services compared to that in one other state, (7) service coordinator caseloads in First Steps compared to other programs, and (8) parents judgments of First Step practices compared to national data.

Changes in the percent of the birth to three population served by First Steps compared to changes in Illinois, Ohio, Michigan, and Kentucky. Figure V shows the changes in percent of the birth to three population served in Indiana compared to other states for the 6-year period from 2002 to 2007. The data are from the U.S. Department of Education (2007) Part C datasheets. As can be seen, First Steps has consistently served a larger percentage of the birth to three population, which, at least to some degree, was due to the broad-based or liberal eligibility determination used by First Steps (see Dunst & Hamby, 2004) before the policy and program changes constituting the focus of evaluation (Indiana Bureau of Child Development Services, n.d.-b).

In all years, except 2007, First Steps served a larger percentage of children compared to all the other states. Indiana and Illinois served about the same percent of the birth to three population in 2007. Starting in 2004 and continuing through 2007, First Steps showed a steady decrease in the percent of the birth to three population served, whereas the other states all

showed small (Michigan and Kentucky) or moderate (Illinois and Ohio) increases. These findings indicate that the expected effects of changes in the First Steps eligibility definition appear to have had the expected outcome.

Between and within state variability in the percent of the birth to three population served in the Indiana counties. The variability in the percent of the birth to three population served by First Steps in the 92 Indiana counties (First Steps Evaluation report, Table 11) compared to variability found in other states (Fromewick, 2004; Fromewick & Dunst, 2005) is displayed

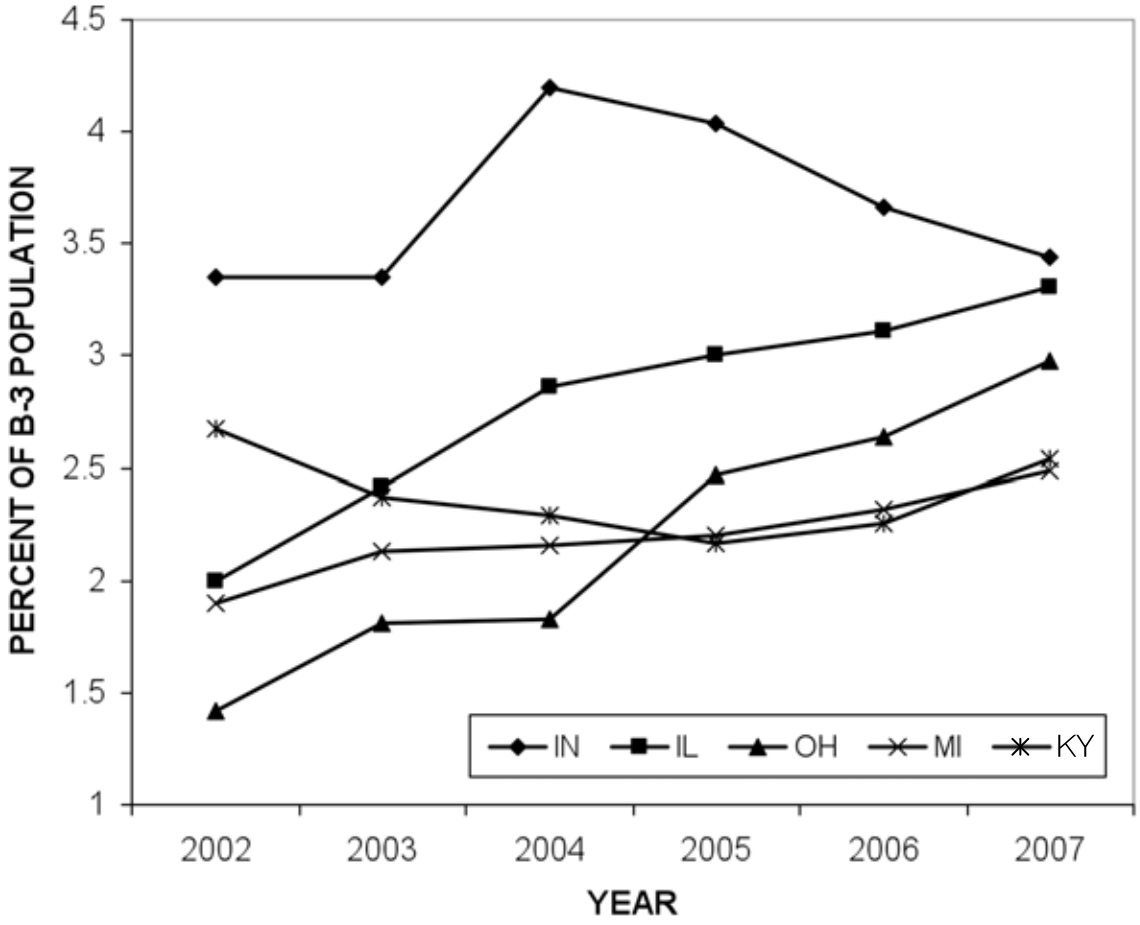

FIGURE V. Changes in the percentages of the birth to three population served in First Steps and in the states contiguous to Indiana.

in Figure VI. What are shown are the smallest and largest percents of children served in the counties in states having sufficiently large numbers of counties. (The comparative states were selected based solely on the number of counties in the states and not according to variability.) The findings are ordered by states having smallest to largest variability within states. Half of the states had smaller variability, and half the states had larger variability, compared to First Steps. The variability reported in the First Steps Evaluation therefore is somewhat larger compared to some states, but somewhat smaller compared to other states.

Distribution of services provided by First Steps compared to national findings. Findings reported in the National Early Intervention Longitudinal Study (NEILS; Hebbeler et al., 2007) were compared to those in the First Steps Evaluation to determine the extent to which there were

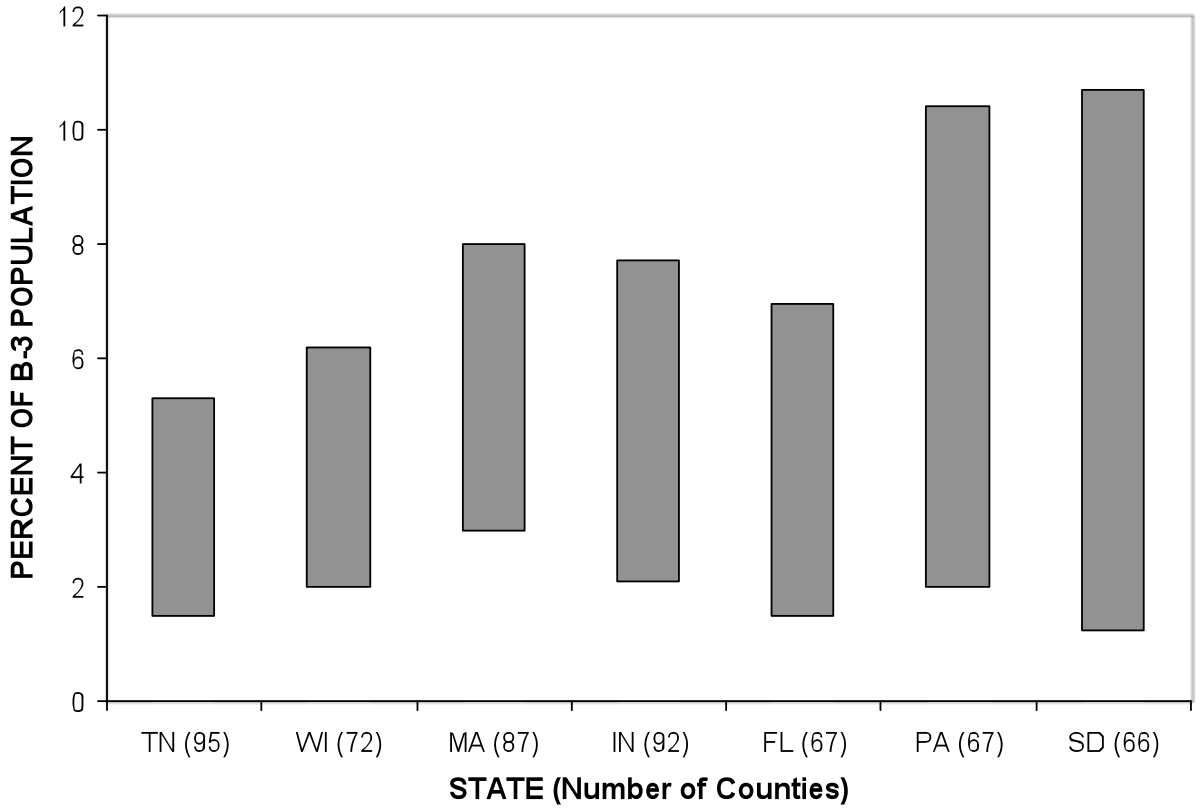

FIGURE VI. Variability in the percentage of the birth to three population served in individual counties within seven states.

similarities or differences in the types of services provided to children receiving early intervention. The results are shown in Figure VII for the four services most frequently provided to infants and toddlers in IDEA Part C early intervention. The percent of children receiving speech therapy and physical therapy in First Steps and NEILS were much alike, whereas First Steps delivered more developmental therapy compared to that reported by NEILS, whereas more children in the NEILS study received occupational therapy compared to First Steps. These findings indicate that the services provided children by First Steps, and the distributions according to type of service, are much like those provided to other children receiving early intervention nationally.

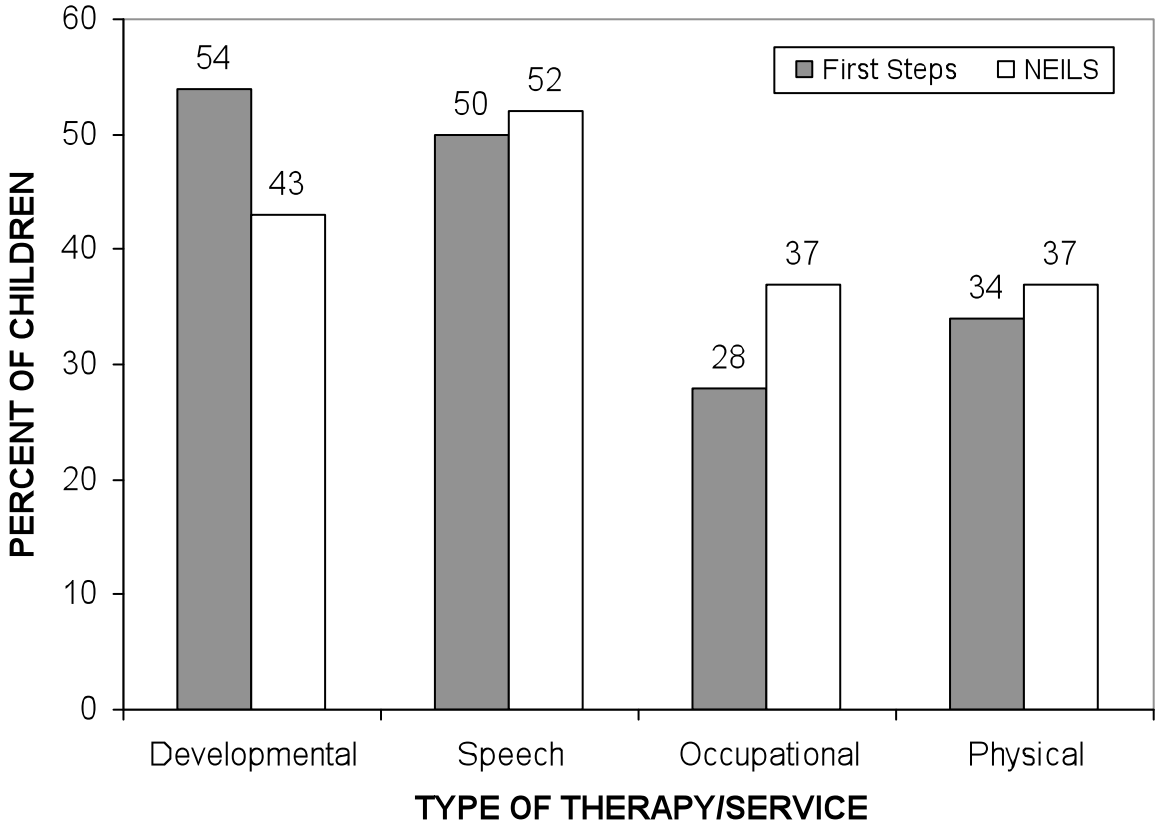

FIGURE VII. Percentage of children in First Steps and other early intervention programs receiving the four most frequently provided child services. NEILS = National Early Intervention Longitudinal Study (Hebbeler, Spiker, Mallik, Scarborough, & Simeonsson, 2003).

Distribution of services on IFSPs in Indiana compared to other states. Figure VIII shows the percent of children whose IFSPs (as reported to the Office of Special Education Programs) had four different kinds of recommended services in Indiana compared to the states contiguous to Indiana. The figure also includes the percent of children's IFSPs which included each type of service in all United States (removing Indiana from the calculations). The data are from the U.S. Department of Education (2007) Part C datasheets, and the findings were calculated as the number of IFSP services reported to OSEP divided by the total number of children served in the IDEA Part C early intervention in the states.

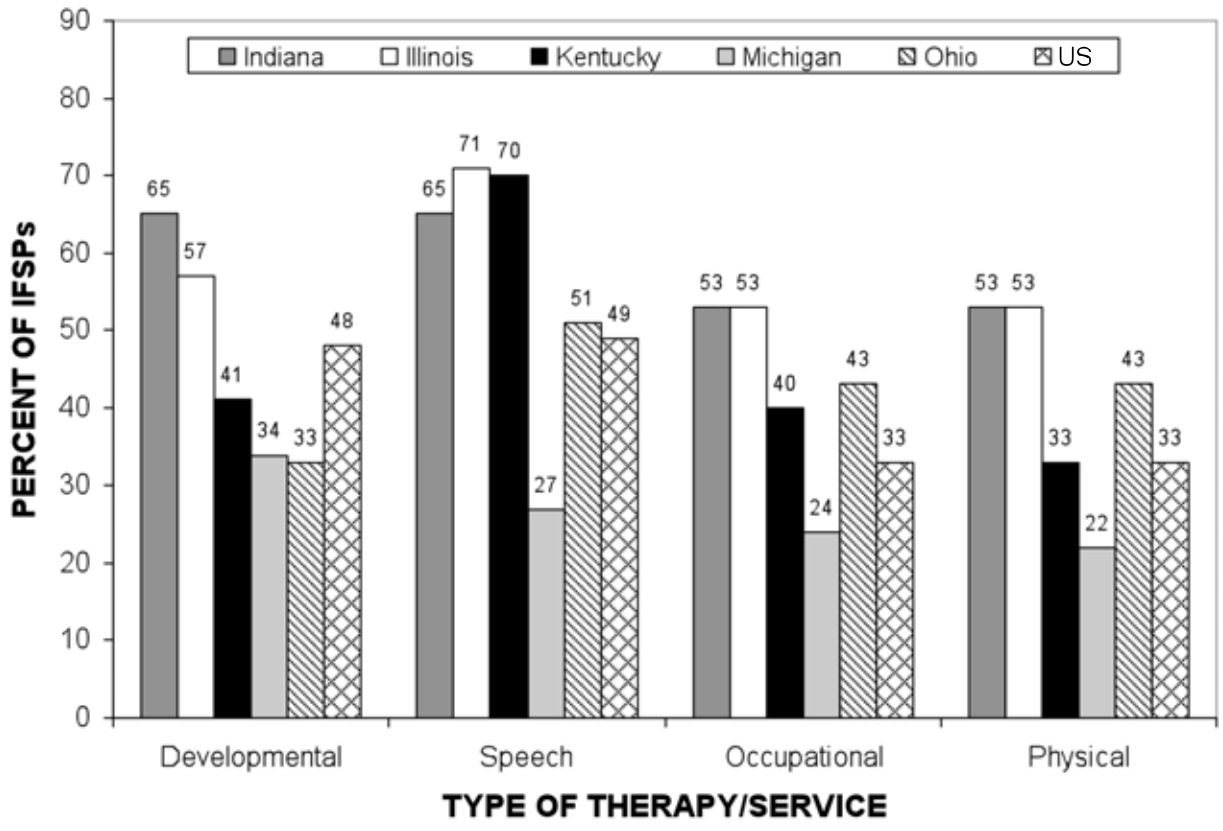

FIGURE VIII. Percentages of IFSPs that included the four most frequently provided child services in First Steps, the states contiguous to Indiana, and all other United States.

The percentage of First Steps IFSPs including the four services, compared to all other United States, was higher for developmental, speech, occupational, and physical therapy. The differences, on average, showed that the IFSPs for children in First Steps had 18% more of the services prescribed than in other states.

A larger percentage of First Steps IFSPs included developmental therapy, occupational therapy, and physical therapy compared to Kentucky, Michigan, and Ohio, whereas First Steps IFSPs had similar numbers of speech and language therapy services compared to Illinois and Kentucky, but more compared to Michigan and Ohio. The results, taken together, indicate some differences in the ways in which child service decisions are made in Indiana compared to states contiguous to Indiana (as well as nationwide), at least for some services.

Average hours of services provided by First Steps compared to national findings. Data from a National Study of Service Coordination and Early Intervention Services (Bruder & Dunst, 2008; Dunst & Bruder, 2006) were used to calculate the average number of hours of services provided per month to determine if First Steps findings were similar or different than in other states. The comparison is shown in Figure IX. Overall, the pattern of results is more similar than different. The one exception is for speech and language therapy where children in First Steps, on average, were provided one less hour of service per month compared to programs in other states.

Costs of providing First Steps services. A single report was located that included expenditure data in the same format as in the First Steps Evaluation report (Reinhard, 2006). The costs per hour for the four child services provided most often to First Steps children reported by Conn-Powers et al. (2008) was compared to the Virginia data to discern similarities and differences in unit costs. Figure X (p. 29) shows the results. Except for developmental therapy, the unit costs of speech, occupational, and physical therapy were higher in First Steps compared

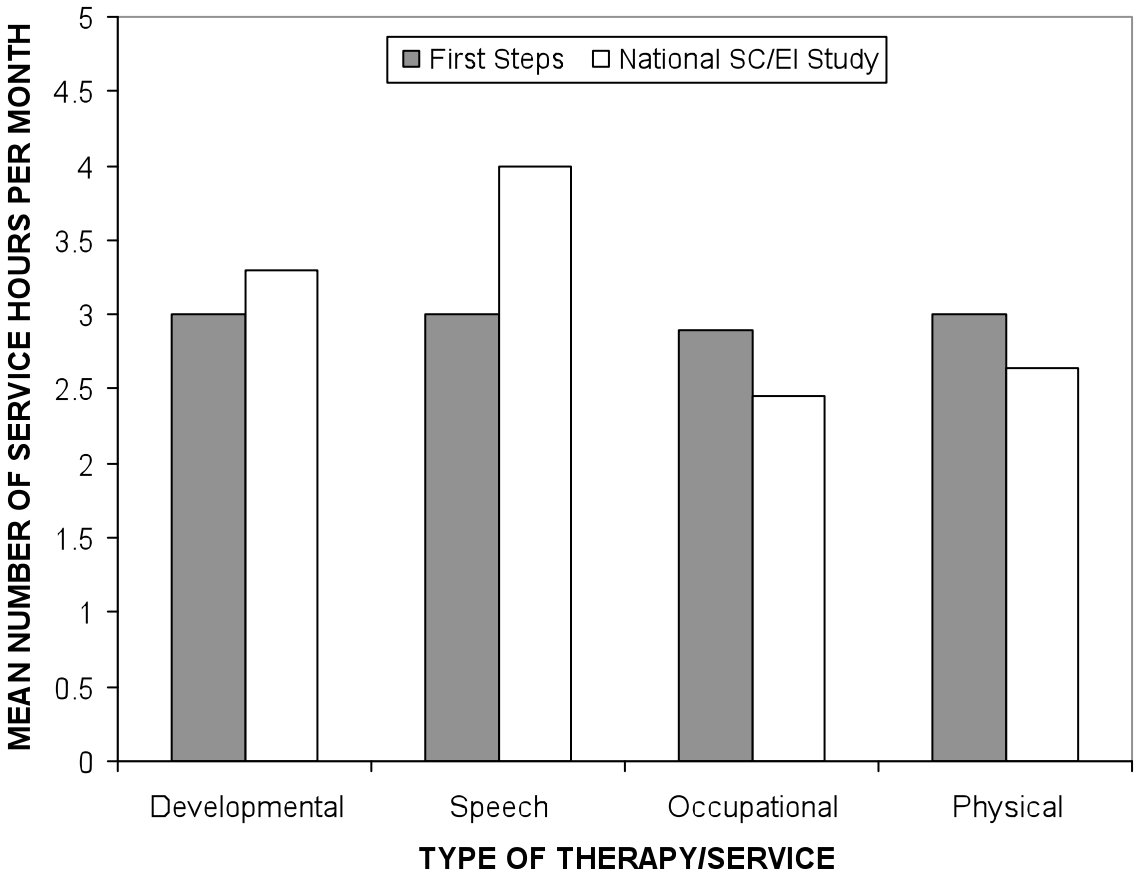

FIGURE IX. Average number of hours of the most frequently provided child services in First Steps and other early intervention programs throughout the United States. SC/EI = Service Coordination and Early Intervention Survey (Dunst & Bruder, 2006).

to Virginia. Caution is warranted, however, in drawing any definitive conclusions from the findings, since the methods used to determine the number of children receiving the four different services in Virginia were not identical to that in Indiana. The ways in which children were counted in Virginia appeared to overestimate the number of children actually receiving the services, which would have (and in all probability) depressed the hourly costs per service. It is of some importance to note that compared to data included in the Hebbeler et al. (2007) National Early Intervention Longitudinal Study report, the per hour costs of services in First Steps is somewhat less than that found nationally.

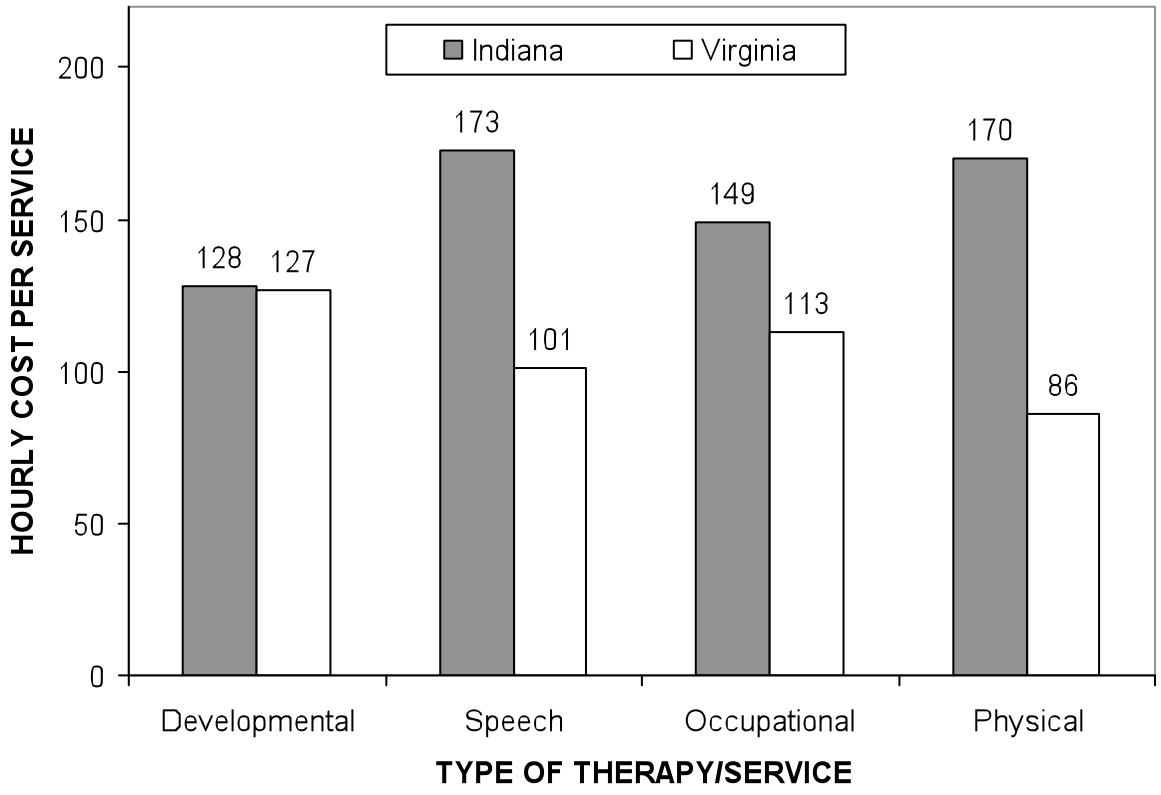

FIGURE X. Estimated hourly costs for the four most frequently provided child services in Indiana and Virginia.

Service coordinator caseloads. First Steps uses an independent (Dunst & Bruder, 2006) or dedicated (Roberts et al., 2005) service coordinator model where service coordinators provide only service coordination. However, unlike other states where service coordinators provide only service coordination and no early intervention services (Bruder, 2005; Harbin et al., 2004), First Steps can be service coordinators for some families but provide early intervention services to other families. Technically, the model used by First Steps is more of a hybrid independent service coordination model.

Data from a Utah State University Early Intervention Research Institute study was used to compare service coordinator caseloads in First Steps with other programs using different service coordination models (Roberts et al., 2005). The results are shown in Figure XI. The service coordinator caseloads in First Steps is about 10 less, on average, compared to two other programs also using a dedicated service coordination model, and about 35 higher than in early intervention programs using a combined service coordination model where service coordinators perform additional early intervention functions. Large service coordination caseloads are problematic because service coordinators have infrequent contact with families and they are seen as less helpful by the families (Dunst & Bruder, 2006).

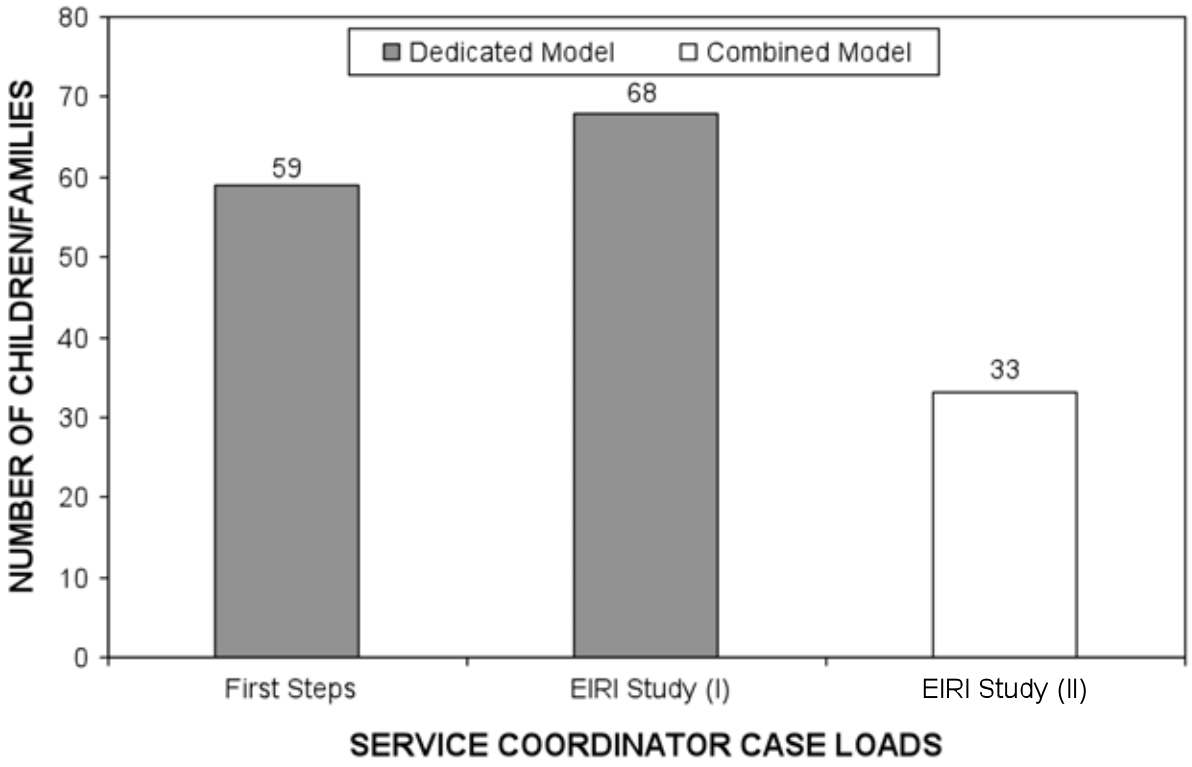

FIGURE XI. Average service coordinator caseloads in Indiana and in other early intervention programs using different service coordinator models. EIRI = Early Intervention Research Institute (Roberts et al., 2005).

Parents judgments of the quality of First Step practices. The survey completed by First Steps parents and a survey completed by parents in a national study of service coordination and early intervention services (Dunst & Bruder, 2006) were compared to determine similarities and differences in parents judgments of the quality of IDEA Part C early intervention. The two surveys included six items that were worded the same or in a very similar manner. The results are shown in Figure XII. What are shown are the percent of parents who indicated the providers *always* used the practices.

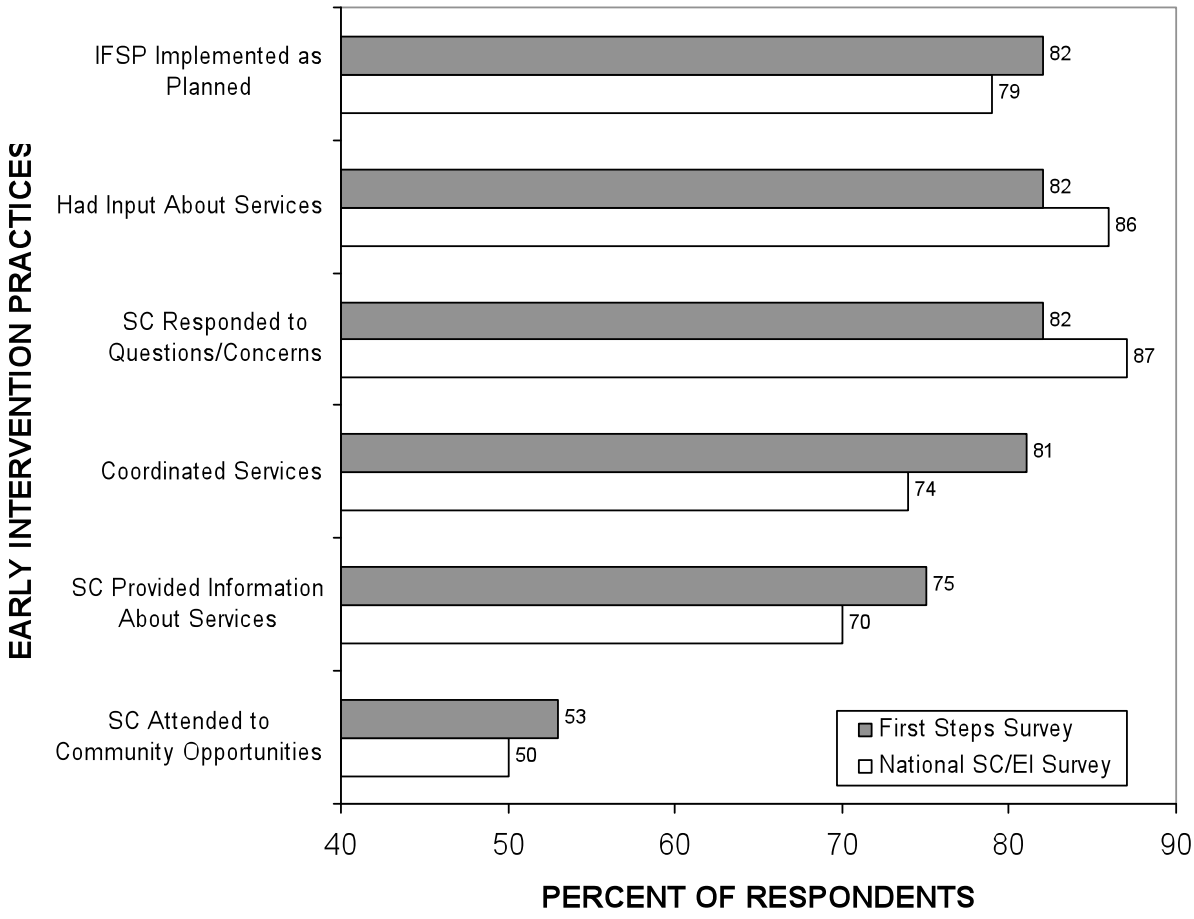

FIGURE XII. Percentage of parents in First Steps and other early intervention programs throughout the United States that indicated service providers and service coordinators always used six different practices. SC/EI = Service Coordination and Early Intervention Survey (Dunst & Bruder, 2006).

The findings were very much alike for both samples of parents. Between 75% and 87% of the parents in both surveys indicated that their child and family's IFSP was being implemented as planned, the parents had input regarding the content of the IFSP and the services provided, service coordinators were responsive to the parents questions and concerns, and that services were provided in a coordinated manner. The extent to which the parents said the service coordinators provided information about available early intervention services, and especially community support and resources, was noticeably lower than for the other practices. The latter has been the case regardless of service coordinator model, and is an indication that the focus of early intervention service coordination practices primarily focuses on the services authorized by IDEA Part C early intervention (Dunst & Bruder, 2006).

Conclusions

The major conclusions from the First Steps Evaluation, and the external review and audit of the evaluation, are:

- The external review and audit found the First Steps Evaluation comprehensive, focused on the questions the evaluators were asked to answer, and produced findings that permitted policymakers and other stakeholders to discern the extent to which changes in First Steps policies and procedures were associated with intended effects. The external reviewer considered the approach used by the First Steps evaluators well planned and conceptualized, the data analytic strategies appropriate to the task, and the findings and conclusions made from the results accurate and consistent with the data.
- The First Steps Evaluation was a multi-method, multi-source, multi-measure approach to answering the questions posed by the First Steps policy makers and stakeholders. The different sets of data in the largest numbers of analyses yielded converging

evidence about the impact of the First Steps policy and program changes on outcomes of interest. The kind of triangulation conducted by the First Steps evaluators increases the credibility of the findings, and permit more informed inferences from the data.

- The findings and results from the First Steps Evaluation, and especially the patterns of change after compared to before and during the policy and program changes, showed that most of the expected effects of the changes were realized. These included, but were not limited to, decreases in the total number of children served by First Steps, decreases in the percent of the birth to three population served by the early intervention system, and decreases in the total amount of First Steps expenditures as well per unit (service) costs, while at the same time providing, on average, the same amount of hours of service per child and not negatively affecting parents' judgments of the quality of First Steps services. The findings as a whole show that the kinds of effects that were expected included the desired results of the First Steps changes.
- A number of apparent "side effects" of the First Steps policy and program changes occurred that should be given further attention to be sure they were not negative consequences of the changes that occurred. These included the numbers of IFSPs being developed by only two parties (service coordinator and parent) and the large number of providers who discontinued being First Steps providers during the implementation of the policy and program changes. The kinds of broad-based changes instituted by First Steps would have been expected to have unanticipated effects. Those need not be seen as "negatives" but as opportunities to make adjustments in the First Steps system to make further improvements.

- Placed in the context of anticipated (expected) and unanticipated consequences of the First Steps policy and program changes, there were considerably more of the former compared to the latter. Therefore, the changes the First Steps policymakers put into place, and the effects they were intended to have, would lead one to conclude that First Steps was successful in what it started out to achieve. The extent to which stakeholders agree awaits their assessment of the First Steps Evaluation and their own assessment of this external review and audit.
- The many comparisons made between First Steps and early intervention programs in other states found more similarities than differences on the measures used to make the comparisons. This was especially the case after the First Steps policy and program changes were made, perhaps best shown by the decrease in the percent of the birth to three population that was found in the most recent (2007) reporting period. The one exception is the number of services included on IFSPs, which tended to be higher in First Steps compared to some other states. Notwithstanding this one finding, the Indiana early intervention system for the most part is operating in ways that parallel how early intervention has evolved and is currently practiced in other states.

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Appendix A

Original Stakeholder Questions

Demographics	
1.	What is the number of referrals, intakes, evaluation, and initial IFSPs by age and by county during 2005, 2006, and 2007? Identify trends and provide analysis.
2.	What is the number of providers by discipline by county providing services during 2005, 2006, and 2007?
3.	What is the number of children served by county, by level of delay or diagnosis compared for 2005, 2006, and 2007?
4.	What is the time from referral to service 2005 to 2007?
5.	What are the numbers of providers by county, by specialization or category (2005, 2006, and 2007)?
6.	Are service coordinators efficiently (timeliness, number of cases, are they overburdened) handling caseloads in large county areas from cluster office?
7.	What is the number of initial Individualized Family Service Plan (IFSP) meetings during 2006 and 2007 with no Eligibility Determination Team (EDT) attendance?
8.	What is the number of providers who have entered and left by discipline and by county from 2005 to 2007?
9.	What is the number of providers by discipline by county entering the system during 2005, 2006, and 2007?
10.	Are we serving a good demographic cross section of eligible children or are there pockets of need (e.g. sufficient services for children in very rural and very urban areas)?
Fiscal	
1.	Are children with comparable diagnoses and delays receiving comparable levels of service/expenditures by cluster/by ED Team?
2.	Average cost per child further refined to reflect average cost for severity of disability 2005-2007.
3.	What are the numbers of families leaving the program due to cost participation?
4.	Does the average cost per child differ by income category of family?
5.	What are the total First Step Expenditures for 2005, 2006, and 2007?
6.	What is the average cost of services per discipline?
7.	What percent of the amount billed to the parent is collected by the state?
8.	What are the System Point of Entry (SPOE) costs compared for 2005, 2006, and 2007?
9.	What amount of money has been spent on direct services by discipline in 2005, 2006, and 2007 adjusted for eligibility changes?

Appendix A, continued

10. What is the number of families that do not initiate the enrollment process once they learn of cost participation?
11. Are providers leaving the program due to reimbursement rates?

Policy Changes

1. What is the number of children determined eligible before and after the implementation of Assessment, Evaluation, and Program System for Infants and Toddlers (AEPS)?
2. What is the consistency of the application of AEPS (parent interview versus direct administration)?
3. Are children receiving services that are recommended (recommended versus availability of providers in the area)?
4. Are children with comparable diagnoses and delays receiving comparable levels of service/expenditures by cluster?
5. Are recommendations being made based on provider availability?
6. What are the income levels of children to determine how families are being impacted by cost participation?
7. Do families have an effective choice of a service coordinator within the SPOE?
8. Are policy changes being implemented consistently cluster to cluster?
9. What is the number of children determined eligible after the May 1, 2006 implementation of eligibility criteria.
10. What is the impact of the use of the AEPS?
11. What is the comfort level of providers in their use of the AEPS?

Administration and Infrastructure

1. What is the most effective way to insure adequate numbers of providers in each area?
2. What would providers see as an incentive to serve underserved populations?
3. In those areas with a suspected provider "shortage," is it due to lack of providers, over-utilization, or both?
4. Should there be payment premiums for providers who agree to practice in high needs areas?
5. Has the movement of the central reimbursement office (CRO) from Covansys to EDS resulted in provider billing frustration and departure from the system?
6. How are we ensuring quality providers in the system?
7. How can we improve communication between central office and SPOEs/LPCCs/providers and parents?
8. Would a random sample of providers rate the training provided as effective, and of value?

Appendix B

Individual Judgments of the Quality, Appropriateness and Accuracy
of the Independent Review and Audit of First Steps

Evaluation Ratings: HA = Highly acceptable, AC = Acceptable, MA = Minimally acceptable, NA = Not acceptable, and NR = Not ratable/no analyses.

	Evaluation Dimension		
Questions/Focus[a]	Quality	Appropriateness	Accuracy
1.1 Number of referrals, intakes, evaluations, and initial IFSPs	HA	HA	HA
1.2 Time from referral to services	HA	HA	HA
1.3 Number of eligible children	HA	AC	HA
1.4 Impact of AEPS	NR	NR	NR
1.5 Number of children served before/after adoption of AEPS	HA	AC	HA
1.6 Number of child evaluations	NR	NR	NR
1.7 Number of providers attending IFSP meeting	HA	HA	HA
1.8 Families declining participation/withdrawing	HA	HA	HA
2.1 Number of children served by county and eligibility category	HA	HA	HA
2.2 Participation by income and ethnicity	HA	HA	HA
2.3 Participation by Cluster	HA	AC	HA
2.4 Participation by demographics	HA	AC	AC
2.5 Families leaving First Steps due to costs	HA	HA	HA
3.1 Children receiving recommended services	HA	HA	HA
3.2 Provider availability and recommended services	HA	AC	AC

[a] Appendix A includes the complete set of questions that the First Steps Evaluators were asked to answer.

Appendix B, continued

Questions/Focus	Evaluation Dimension		
	Quality	Appropriateness	Accuracy
3.3 Services/expenditures by eligibility category	HA	HA	HA
3.4 Service coordinator caseloads	HA	AC	HA
3.5 Service coordinator efficiency	HA	HA	AC
3.6 Family choice of service coordinators	HA	HA	HA
4.1 First Steps total expenditures	HA	HA	HA
4.2 Direct service expenditures by discipline	HA	HA	HA
4.3 Average cost of services by discipline	HA	HA	HA
4.4 Average cost by eligibility category	HA	HA	HA
4.5 SPOE costs	AC	AC	AC
4.6 Family income levels and cost participation	HA	HA	HA
4.7 Average service cost per income category	NR	NR	NR
4.8 Percent of collection of billed services	HA	HA	HA
5.1 Policy implementation by Cluster	NR	NR	NR
5.2 Consistency in administering AEPS	AC	AC	AC
5.3 Provider concerns about AEPS administration (comfort level)	HA	AC	HA
5.4 Scheduling administration of the AEPS	AC	AC	AC
5.5 EDT member concerns	NR	NR	NR
5.6 Congruence between policy recommendations and changes	AC	AC	AC
6.1 Number of providers by discipline and types of services	NR	NR	NR
6.2 Number of providers by specialization	HA	HA	HA
6.3 Number of providers entering First Steps	HA	HA	HA
6.4 Number of providers exiting/leaving First Steps	HA	HA	HA

Appendix B, continued

Questions/Focus	Evaluation Dimension		
	Quality	Appropriateness	Accuracy
6.5 Reasons for First Steps provider shortages	HA	AC	AC
6.6 Provider recruitment strategies	NR	NR	NR
6.7 Ensuring provider quality	NR	NR	NR
6.8 Provider assessment of First Steps professional development	HA	AC	HA
6.9 Provider incentives	NR	NR	NR
6.10 Premium payment for serving underserved areas	AC	AC	AC
6.11 Effects of changes in central reimbursement office	HA	HA	HA
6.12 Communication between CO/SPOE/LPCC/providers/parents	AC	AC	AC

Independent Evaluation and External Review of First Steps: Summary of Findings

Presentation to the

(MR)DD Legislative Commission

October 14, 2008

Peter Bisbecos

Division of Disability and Rehabilitative Services

Audit, Review, & Validation

Independent Audit conducted by:

Early Childhood Center
IN Institute on Disability & Community
Indiana University-Bloomington
Michael Conn-Powers, PhD

External Review conducted by:

Carl Dunst, PhD, Research Scientist
Orelena Hawks Puckett Institute
Asheville, North Carolina
National Expert in Early Intervention

- Independent Auditor selected by consensus of First Steps Stakeholders, Governor's Interagency Coordinating Council on Infants and Toddlers (ICC), & DDRS
- External Reviewer selected by ICC and approved by Peter Bisbecos, Director, DDRS

External Review: Quality, Appropriateness and Accuracy of the First Steps Evaluation

1. Evaluation was judged as high quality in terms of the conceptualization and logic in analyzing the data.
2. Data analysis procedures was assessed as highly appropriate in terms of answering the evaluation questions.
3. Interpretation of the findings was judged as highly accurate.
4. The First Steps evaluation was conducted in a manner that answered the questions posed by stakeholders
5. The First Steps evaluation ascertained the extent to which anticipated changes had expected effects (as well as identified some potential negative consequences)

1. Has there been a negative impact on the number and types of children and families entering and receiving First Steps services?

a) Indiana ranks high nationally in terms of the proportion of children served.

b) There have been steady increases in the number of families referred to First Steps.

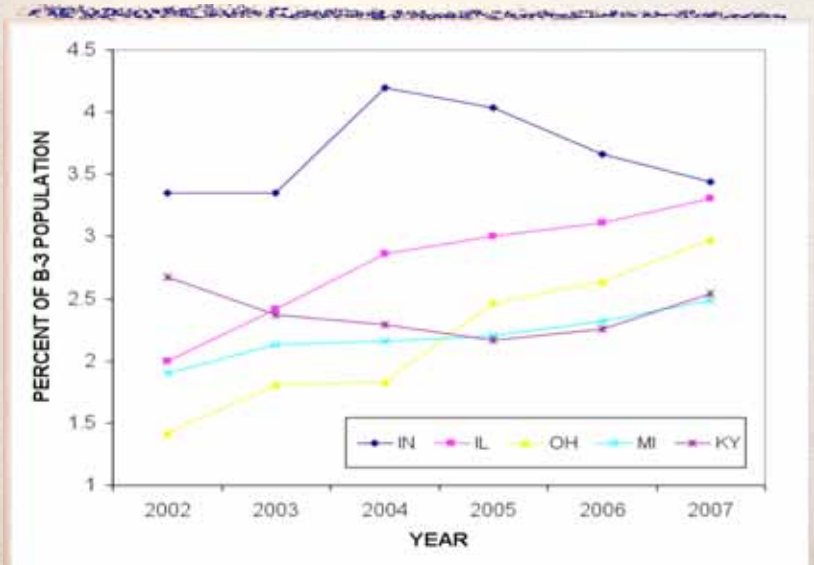
c) The number of new children entering First Steps decreased 8%- an intended result of changes in eligibility and less than the 15% predicted.

d) The number and proportion of children identified by First Steps in their first 12 months of life has declined 25% since 2004. From 2006 to 2007, this decline was 8%.

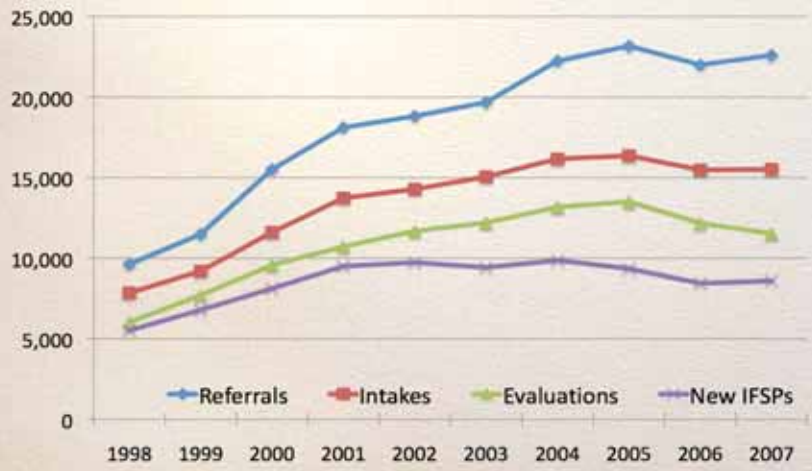
e) The rate at which families have declined or withdrawn from services has remained constant.

f) Cost participation was rarely the reason given for declines or withdrawals.

Percent of Birth to 3 Population Served Across States



Number of Referrals, Intakes, Evaluations, & IFSPs by Year*



*Source: FSSA Data Warehouse

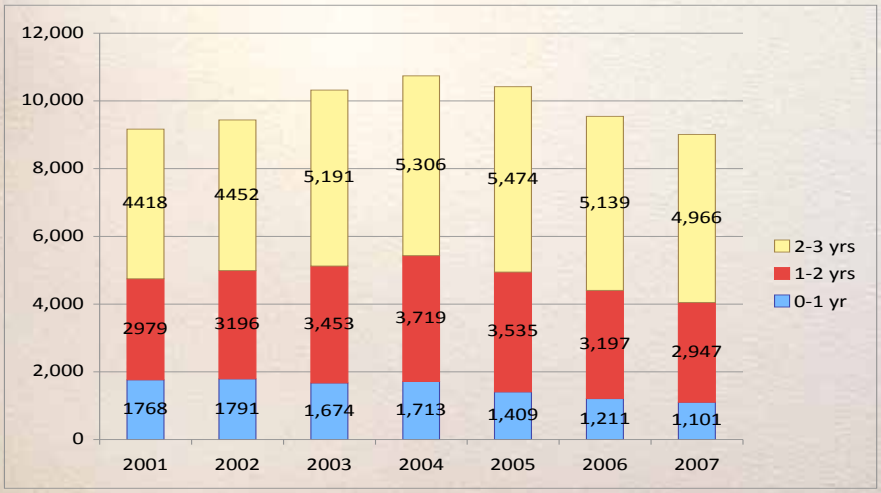
Adjusted[1] Family Income Level of Children Served by First Steps*

Federal Poverty Guideline	2004	2005	2006	2007
0-250%	66.7%	68.3%	70.7%	72.2%
251-350%	16.2%	15.0%	13.2%	12.5%
351-450%	8.4%	8.1%	7.6%	7.7%
451-550%	4.2%	4.1%	4.1%	3.8%
551-650%	2.1%	2.1%	2.1%	2.0%
651-750%	1.1%	1.1%	1.0%	0.9%
751-850%	0.5%	0.4%	0.4%	0.3%
851-1000%	0.4%	0.4%	0.3%	0.2%
1000%+	0.4%	0.5%	0.4%	0.4%

[1] Family income is adjusted for medical expenses

*Source: FSSA Data Warehouse

Number of Children Receiving Services on December 1 by Year*



*Source: Federal Child Count Report

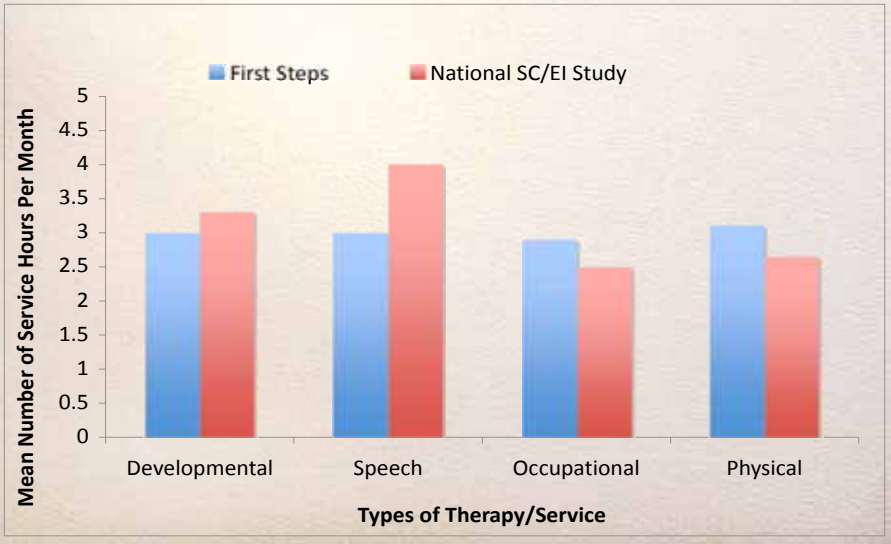
2. Has there been a negative impact on the types and amounts of services children and families receive?

a) Nationally, Indiana provides a comparable amount (hours/ month) of services to children and families as other states, and the number of different services included on individual plans tends to be larger than most other states.

b) The average number of hours of service received has declined slightly, from 5.3 hours in 2004 to 5.1 hours in 2007.

c) Further examination of service trends involving middle and upper-income families may be warranted. In 2004, there were minimal differences among income levels; in 2007, there were some indication of decreases in services and service costs as income rose.

National Comparison: Average Hours of Services Provided in First Steps

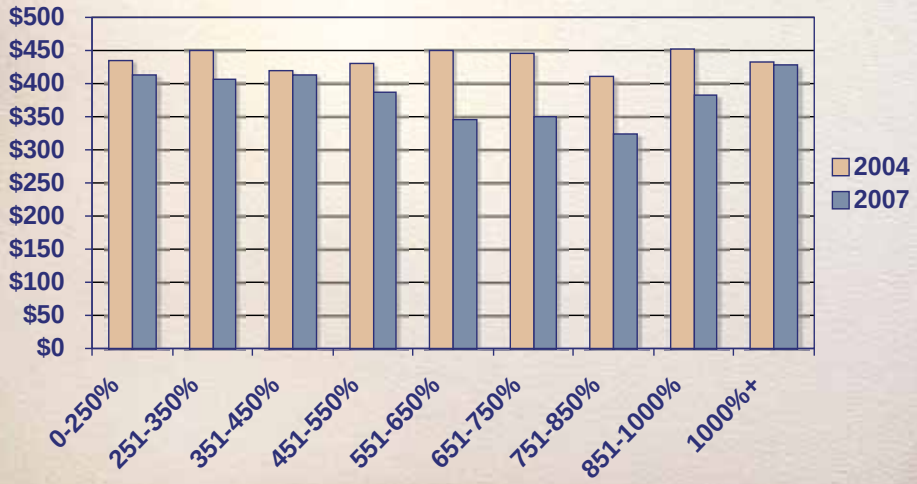


Number and Amount of Services Initially Authorized and Provided*

Year Entered	Number of Services Initially Authorized	Number of Services Provided	Number of Hours/ Month of Service Provided
2004	2.0	2.8	5.3
2005	2.0	2.8	6.0
2006	1.9	2.6	5.4
2007	1.7	Incomplete data	5.1

*Source: FSSA Data Warehouse

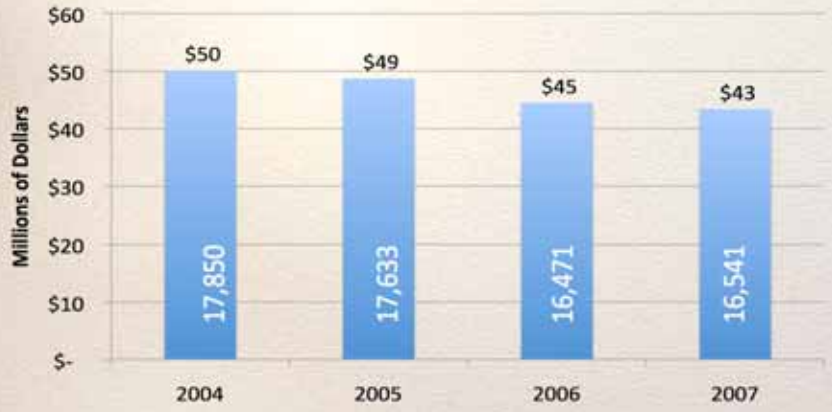
Average Monthly Costs Across Adjusted Income Levels in 2007*



3. Has there been a negative impact on the costs of providing services?

1. From 2004 to 2007, there was a 13% decrease in expenditures for direct services due to planned eligibility changes and a slight decline in average monthly service costs.
2. In the first half of 2008, the funds recovered by First Steps from family co-pays greatly exceeded the amount spent to recover them. Also, the majority of families billed for services made monthly payments.
3. The vast majority of First Steps families owe no co-pay due to their adjusted income level.
4. The policy of First Steps is that families are not penalized for non-payment (e.g., turned over to a collection agency, services discontinued).

Total Expenditures for Direct Services and Number of Children*



*Does not include Service Coordination
Source: FSSA Data Warehouse

4. Has there been a negative impact on the recruitment and retention of service providers?

a) Nationally, states have reported personnel shortages because of system changes.

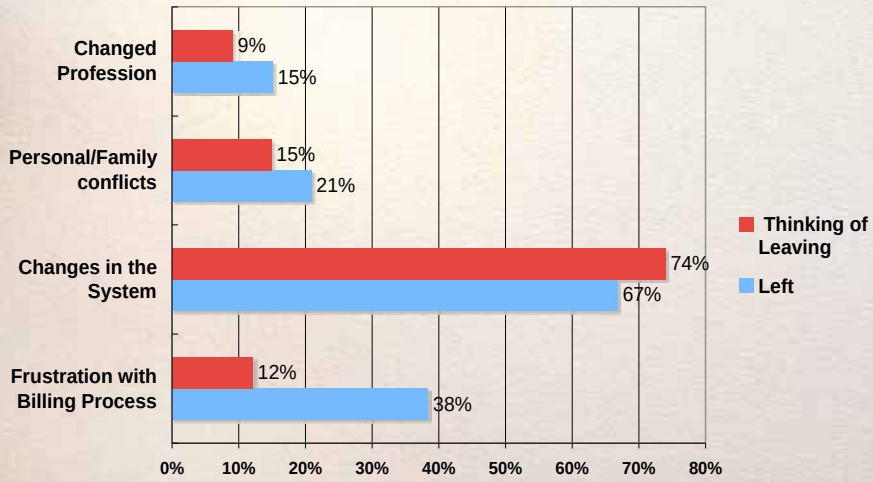
b) From 2004 to 2007, the total number of providers billing First Steps for services declined 15%.

c) For three major service areas, there is a trend in which First Steps is losing more providers than it is recruiting.

d) Evaluation team members and service coordinators report that there is a shortage of some providers that impacts the services recommended and provided to children.

e) Providers who left or were thinking of leaving First Steps indicated that changes in the First Steps system and frustration with the billing system were primary reasons.

Reasons Providers Leave or Think of Leaving (N=518)



*Source: Provider Survey

5. Has there been a negative impact on the quality of services children and families receive?

a) Nationally, service coordinator caseloads in Indiana are comparable to caseloads in other states.

b) The average caseload for service coordinators has increased from 40 to 60 since 2004; however, both service coordinators and families report high quality services.

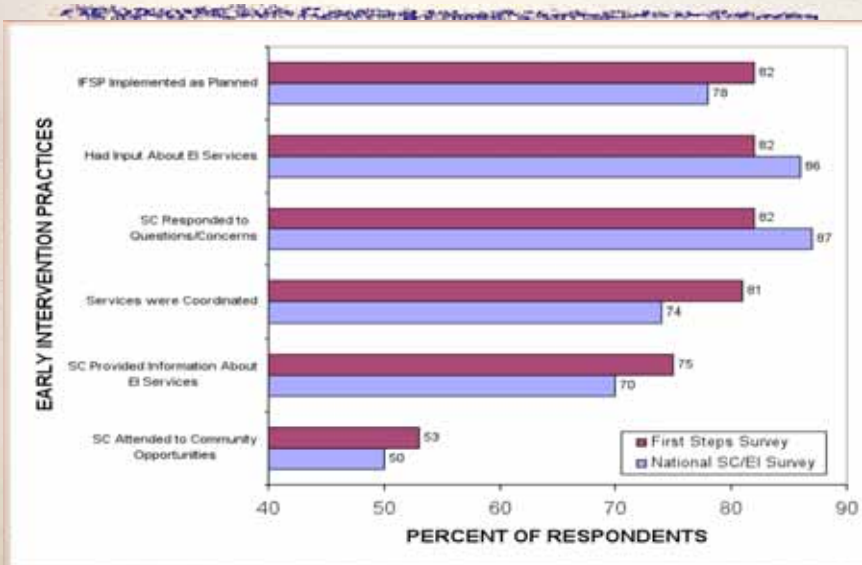
c) As a result of changes in the evaluation process, First Steps effectively decreased the time it takes for children to begin receiving services.

d) The number of initial family service plans developed by a *multidisciplinary team* (2 or more disciplines) has decreased substantially. While providers reported that service quality may be affected, further investigation is needed.

e) Families rated the quality of First Steps services very high, and expressed numerous positive comments.

Service Coordinator Caseloads

Parent's Assessments



Attendance at Initial Individual Family Service Plan (IFSP) Meetings*

Year	# of IFSPs	0 Providers	1 Provider	2+ Providers	Mean # of Providers
2003	8487	30%	53%	17%	0.9
2004	8872	29%	51%	20%	0.97
2005	8529	24%	51%	25%	1.07
2006	7831	39%	55%	6%	0.67
2007	8414	37%	59%	4%	0.67

*Source: FSSA Data Warehouse

Summary and Conclusions

1. While numerous concerns have been expressed about the potential negative impact on services to children and families, many of these concerns appear to be unfounded.
   a) The number of children and families entering First Steps
   b) The amount and type of services children and families receive.
   c) The quality of services as reported by families
   d) Family cost participation in terms of the costs recovered and the reasons given by families for declining/withdrawing.

Summary and Conclusions

2. There are areas of concern that warrant closer monitoring and further investigation:
   a) The quality of the evaluation process for accurately identifying infants below 12 months of age.
   b) The relationship between family income, particularly at the middle to upper middle income levels, and the amount of services received.
   c) The number of disciplines (multidisciplinary team) attending the initial family service planning meetings
   d) Provider recruitment and retention to address reported providers shortages and their impact on services to children

First Steps Standing Nationally

1. The First Steps system operates in a manner much like that in other states as well as nationally in terms of:
   a) The number and percent of children served,
   b) The average hours of services provided to children
   c) Parent assessment of early intervention practices
2. The percent of child services on individual plans tends to be larger than most other states.
3. The average service coordinator caseloads in First Steps is comparable to other states.

Survey of Service Coordinator Responsibilities Carried Out (N=121)

Service Coordinator Responsibilities	Always	Most	Some/ None
Informing families about what was happening	87.6%	11.6%	0.8%
Explaining parent rights	84.3%	14.0%	1.7%
Insuring families had input about the services	80.2%	15.7%	4.1%
Making families feel comfortable talking with me	73.6%	25.6%	0.8%
Insuring the IFSP addressed the individual concerns	63.6%	32.2%	4.1%
Quickly responding to a family's question and			

Source: Provider Survey

Survey of Service Coordinator Responsibilities Carried Out (N=121)

Service Coordinator Responsibilities	Always	Most	Some/ None
Assisting families to advocate for their child	44.6%	46.3%	9.1%
Insuring that support and services were coordinated	40.5%	52.9%	6.6%
Informing families about community services	38.8%	48.8%	12.4%
Managing cost participation activities	39.7%	45.5%	14.9%
Assisting families coordinating community resources	30.8%	56.0%	13.2%

*Source: Provider Survey

Survey of Families (N=619)

	Always	Most of time	Sometimes/ Not At All
Our IFSP addressed our individual concerns, needs & priorities	82.3%	14.3%	3.4%
We had input about the services our child and family received	82.1%	13.8%	4.0%
My family knew what was happening and about changes	82.0%	14.6%	3.4%
We were comfortable talking with the Service Coordinator	82.0%	12.1%	5.9%

*Source: Family Survey

Survey of Families (N=619)

	Always	Most of time	Sometimes/ Not At All
We felt we were able to successfully advocate for our child	77.6%	18.2%	4.2%
Support and services were coordinated	75.2%	17.3%	7.5%
Service Coordinator quickly responded	74.6%	17.3%	8.1%
Service Coordinator told us about services and resources	74.6%	16.3%	9.1%
Service Coordinator assisted us in coordinating community resources	53.2%	18.6%	28.3%

*Source: Family Survey